

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 34

FEBRUARY, 1935

No. 2

AN APPRAISAL OF THE METHODS OF TREATING PNEUMONIA*

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Lobar pneumonia is always a serious disease and demands all the resources of medical knowledge and the keenest alertness on the part of the attending physician in any case in order to combat it successfully. Despite the fact that the disease is widespread and is a prominent cause of death in the temperate zone, where it outranks all infections, except tuberculosis, in this respect, there still remains a perennial discussion concerning the value of various types of treatment. This is to be expected chiefly because of three reasons:

(1) While true lobar pneumonia is almost always due to the pneumococcus, it must be remembered that there are many strains of this organism which vary considerably in virulence. It is also true that the mortality from the different strains is not the same in all localities and that it changes from one year to the next.

(2) The most disturbing factor which makes authentic deductions regarding treatment difficult, is the tendency of the disease to terminate by a spontaneous crisis which is often sudden and dramatic. If any type of medication has been given within a short time prior to this event, it is a very easy matter to ascribe the recovery erroneously to the therapeutic agent which was employed rather than the natural resistance of

the body. The only conclusive statements which are acceptable, therefore, concerning the value of any given form of treatment, must be based upon a long series of cases over a period of several years in whom the pneumococcus type has been determined. Moreover, in appraising the therapeutic effectiveness of any treatment under trial it should be applied only to every alternate case in order that the remaining ones may be used for comparison as a control series.

(3) Furthermore, other inconstant factors such as age, alcoholism, the length of time after the onset before treatment is applied, and the efficiency with which it is administered must be taken into consideration.

As an outline of what is to follow let me say that during the past fifteen years sufficient data have accumulated to permit us to make definite conclusions concerning the value of the following therapeutic agents in the disease.

- (1) Anti-pneumococcus serum
- (2) Digitalis
- (3) Oxygen
- (4) Morphine
- (5) A miscellaneous group of drugs which are alleged to be of specific or symptomatic value.

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The Value of Anti-Pneumococcus Serum

The earliest use of anti-serum failed because it was not known that the pneumococcus was of various types and that the anti-serum of any given type had no protective power against the other varieties of the organism. Later they were grouped into four types, designated as I, II, III and IV and an effort was made to produce a specific anti-serum for each of the groups. Serum which had some therapeutic value was prepared for Group I, and possibly Group II, by immunizing horses with these two varieties of the pneumococcus. It has not been possible to the present day to produce a therapeutically active serum for Group III or IV. It has been known since the earliest attempts to group the organism that the latter group is made up of a number of strains, and only recently 29 of these have been identified. Preliminary reports indicate that active anti-sera may be prepared for various members of this group in the future. The original type of anti-pneumococcus serum, however, was unsatisfactory because its therapeutic effect was not striking and in addition it produced an immediate as well as a delayed serum reaction in a very large percentage of cases and these were often associated with untoward symptoms of considerable severity.

In 1924, however, Felton⁸ improved the method of preparing the serum and as a result a potent and very satisfactory product is now commercially available for use in patients who have pneumonia in which the Type I and II pneumococcus is the cause of the disease. The improved preparation is 5 to 10 times as concentrated as the original serum and yet it contains a relatively small amount of protein. As a result it is much more effective than the original serum and reactions following its use occur in only about 10 per cent of the cases.

Practically all observers who have studied large groups of carefully controlled cases during the past few years agree that the efficient use of Felton's anti-pneumococcus serum will reduce the death rate in Type I pneumonia from 30 per cent in the untreated cases to about 15 per cent for those who receive serum. Likewise there is a reduction of from 40 per cent mortality in the untreated cases to about 20 per cent in the Type II serum treated cases. One very important point which influences the statistics

concerning the effect of the serum treatment is the relation between the time when it is instituted and the onset of the disease. There is very conclusive evidence available which indicates that the serum treatment is much more effective when given within 96 hours after the initial symptoms of the disease have appeared. As Finland⁹ states, "After the disease has lasted for 96 hours it is very difficult to gauge the effects, inasmuch as spontaneous recovery may occur in some patients after the fourth day. When treated within ninety-six hours the mortality in Type I cases is about 10 per cent, and in Type II cases 15 per cent."

It must be admitted that until recently all of the reports which indicate the favorable effect from this form of treatment have come from large hospitals which have every form of equipment to deal with the pneumonia problem. The question arises, therefore, can this effective type of therapy be made available to the practitioners so that the large group of patients who are treated in their homes may have the benefit of it with equally good results? The answer to this is to be found in an article by Heffron and Anderson,¹⁰ who report the results obtained by 63 collaborating physicians who carried out the treatment in 15 areas of the State of Massachusetts, each area centering about a hospital. These physicians were given special instructions in anti-pneumococcus serum therapy by means of a one day course offered in the Harvard School of Post Graduate Medical Education and each institution of the fifteen areas had technicians who had been given special training in sputum typing for one week. During a period of two years 421 cases of pneumonia were observed by these physicians. Of these cases, there were 188 who had Type I pneumonia and were treated with Felton's anti-serum. This group had a mortality rate of 10.6 per cent as compared to a rate of 25.9 per cent of eighty-five untreated cases of the same type. This demonstration indicates very clearly that any practitioner with very little special training can apply this type of treatment in such an efficient manner that, in Type I pneumonia at least, the mortality rate may be reduced more than one-half.

It should be emphasized that when certain circumstances prevail the initial dose of the serum may be given before the type of the pneumococcus which is responsible for the

disease is determined. This is logical in certain patients who are critically ill when first seen and it appears urgent to begin the treatment at the earliest possible moment and thereby avoid the delay of some hours which is required in order to type the organism. These patients should be given an initial dose of a polyvalent anti-pneumococcus serum which is now available and is potent against Type I and II pneumococcus infections. Inasmuch as these two groups are responsible for over 50 per cent of all pneumococcus infections of the lungs, the chances are more than equal that an effective type of treatment will be applied. If subsequent typing of the sputum shows that the etiological agent belongs to one of the other groups, the serum treatment should, of course, be discontinued. This plan of therapy is well worth while in certain patients as the chances of causing harmful effects are very slight and the advantages to be gained by avoiding a delay in the serum treatment are considerable.

It is not my intention to consider the practical details of the serum treatment, as a number of excellent articles dealing with this type of therapy have appeared within the past two years.^{3,4} I should like, however, at this time to emphasize several points in regard to it. First, the serum should be given early in the course of the disease; second, it should not be administered without preliminary tests to determine if the patient is sensitive to this type of serum; and third, large amounts should be given within the first forty-eight hours of treatment.

Pneumonia Vaccine

Brief reference should be made to the treatment of pneumonia by means of vaccines. The most optimistic supporter of this form of treatment is Alexander Lambert¹² who in 1926 gave his report dealing with the results obtained at Bellevue Hospital with 474 vaccinated patients and 482 controls over a period of eight years. The vaccine used contained 100,000,000 mixed pneumococci per c.c. with the addition of influenza bacilli, streptococci, staphylococci and micrococcus catarrhalis. The dosage used was 1.5 c.c. intramuscularly every 6 hours. He reports that 24 per cent of the patients who were treated with vaccine died whereas there was a mortality of 44 per cent in the control group. The most striking results are

shown in the group who were treated within forty-eight hours after the onset of the disease. In ninety-seven patients who were in this group there was a mortality rate of 9.3 per cent, whereas in a similar number of patients in the control group there was a fatal termination of 44 per cent of the cases. Lambert stated that the patients whom he "treated were the type in the big City Hospital of Bellevue through eight years, in which the old and young, weak and strong, the alcoholic and non-alcoholic were taken alternately as they came in, with no choice between patients." He does not state the type of pneumonia from which his patients were suffering. I am not an advocate of the vaccine therapy of pneumonia because I have not had sufficient first hand experience with it. Moreover, if a patient has a pneumonia due to a specific organism, it seems logical to assume that this infection should be an adequate stimulus to antibody formation without the aid of vaccine. Nevertheless the difference between the control and the treated group in this apparently well controlled series is so striking that this form of treatment should be investigated further and given careful consideration.

Oxygen Therapy

For the past twelve years oxygen therapy has been given a thorough trial as an adjunct in the treatment of pneumonia and we should now be in a position to evaluate its usefulness. Potts¹³ has recently written a very excellent review of the present status of oxygen therapy in various diseases, including pneumonia. The logical basis for this form of treatment is as follows: It is known that normally the arterial blood is saturated with oxygen to about 95 per cent of its total capacity. It seems safe to say that all patients with pneumonia have some deficiency in the oxygen saturation of the arterial blood at some time during the course of the disease. This may vary from a very slight decrease to a saturation of only 60 per cent or lower in critically ill patients. While the deficiency of oxygen in the arterial blood, or anoxemia as it is called, and cyanosis are not synonymous, nevertheless, the degree of cyanosis and oxygen saturation of the arterial blood parallel each other very closely. For example, if there is a slight cyanosis the oxygen saturation will be about 88 per cent and with a marked cyano-

sis the oxygen saturation will be as low as 75 per cent. The degree of cyanosis in a patient with pneumonia, therefore, parallels the amount of anoxemia, and is the best clinical guide for the inauguration of oxygen therapy. There is abundant proof that anoxemia occurs frequently in pneumonia and it has been demonstrated repeatedly by clinical and laboratory observations that it may be eliminated by the proper oxygen therapy. The beneficial effects of oxygen therapy in pneumonia are shown by the following changes:

(1) The patient is more comfortable as a result of quieter breathing.

(2) The tachycardia is lessened and frequently there is a drop in body temperature and a slowing of the respiratory rate.

(3) The arterial saturation is increased and the cyanosis disappears.

(4) There is every reason to believe that life is prolonged and a longer period is thereby given for immunity processes to develop.

If oxygen therapy is to be used it is essential that it should be instituted early in the course of the disease at a time when the earliest evidence of cyanosis appears. Furthermore, it should be continued for some time after it has completely disappeared. The exact cause of the anoxemia is probably a combination of factors, the more important of which are rapid, shallow breathing, mechanical interference by the exudate in the alveoli; the failure of the alveolar cells to function as a result of edema and "toxic" influences, and interference with the circulation within the capillary walls as the result of plugging with fibrin. According to Barach^{1,2} any method of oxygen therapy which provides a concentration of oxygen for inhalation of between 40 and 60 per cent is satisfactory. This same observer, Barach, states that the nasal catheter method, which is simple and requires a minimum amount of apparatus, provides a concentration of about 35 per cent. If the method is the only one available it should be used when oxygen therapy is indicated. The most satisfactory and practical way, however, is to apply this form of treatment by means of an oxygen tent which provides a cooled atmosphere with a concentration of about 50 per cent of oxygen. Ordinarily the carbon dioxide which the patient expires in the tent is removed by means of soda lime, but if one

ascribes to the views of Henderson¹¹ that an increase in carbon dioxide is desirable in the treatment of lobar pneumonia as it stimulates deeper breathing, the removal of the soda lime from the apparatus permits an increased concentration of the gas. It is difficult to state how valuable carbon dioxide is in the treatment of lobar pneumonia, but at present it appears that it will be a valuable addition to oxygen therapy.

Digitalis in Pneumonia

For many years there has been a controversy among the members of the profession concerning the indications for the use of digitalis in patients with lobar pneumonia. In 1916 Cohn⁹ of the Rockefeller Institute, after a careful study of the effects of digitalis on the heart in this condition, concluded that the drug was at least harmless and might be of considerable value in certain cases. His statement led to the routine administration of the drug to all patients with this disease in many clinics. After several years experience, however, this practice was modified by many physicians and it was given only in those pneumonia patients who were past fifty years of age, or to those who coincidentally had a chronic congestive failure.

Within recent years two papers have appeared which have definitely settled in my mind the inadvisability of the routine administration of digitalis to these patients. In 1930 Wyckoff, DuBois and Woodruff¹⁵ reported the results of digitalis medication in a large group of patients who were studied at several of the New York hospitals. Of the 742 patients who were observed, about one-half of them received the drug and the other half served as a control group. They reported a 7.7 per cent greater mortality in the group of patients who were digitalized. It was concluded from their observations that digitalis may be of considerable value in an occasional patient who has auricular fibrillation or flutter, but in general they state that "the routine giving of digitalis to patients with lobar pneumonia is dangerous."

These clinical deductions are in accord with the recent work of Cohn and his collaborators,⁶ who have reported observations which greatly clarify the action of digitalis on the heart. In addition to the depression of conduction time in the bundle of His which it causes, the drug has two other main effects. They are (1) to decrease the size

of the heart, and (2) to increase the strength of the contractions. In patients with a heart of normal size, and this is usually the case in lobar pneumonia, the effect of digitalis is to decrease the volume output of the heart. This is because the heart is contracted to an inefficient size and although the strength of the shortened stroke is increased, the result is that the volume output of the heart falls. If digitalis in full therapeutic doses is given to the usual patient with pneumonia, therefore, it will cause a decrease in cardiac output and a resultant deleterious effect. On the other hand, if a patient has a hypertrophied heart, the drug causes it to decrease to a more efficient size and this, with the increase in the strength of the stroke, causes an increase in the cardiac output. The indication for digitalis therapy in patients with lobar pneumonia, therefore, is a heart which is larger than normal, or, in the presence of auricular fibrillation or auricular flutter, and these two types of arrhythmia are estimated to occur in only about five per cent of all cases.

Warfield¹⁴ has recently emphasized that the circulatory failure which occurs in pneumonia is peripheral rather than in the heart itself, and I am inclined to agree with his viewpoint. He advocates the use of strychnine sulphate, 1/20 to 1/10 grain every one to three hours, and states that his results have been good. I have had only a slight experience with this drug and, therefore, am unable to recommend it from my own experience. Moreover, there does not seem to be a logical basis from a pharmacological standpoint for the use of this drug in pneumonia.

Miscellaneous Drugs in the Treatment of Pneumonia

In general it may be said that the only drugs which I have found to be of service in the treatment of lobar pneumonia are those which secure rest for the patient and relieve pain. Quinine and its derivatives, Optochin hydrochloride and Optochin Base (Numoquin Base) have their enthusiastic advocates and it is true that quinine is highly bactericidal for the pneumococcus *in vitro*. There is no proof, however, that it has this action in the body and there has been no convincing evidence derived from the study of the effects of these drugs on a large, well controlled group of patients with

pneumonia, which would indicate that they are effective. Quinine is at least harmless and there is no contraindication to its use in the treatment of this condition, provided the proper attention is given to those patients who have an idiosyncrasy to the drug. The other quinine derivatives, however, should not be employed because serious toxic effects such as a permanent impairment of vision may result.

Of greatest value in the treatment of this disease are the hypnotic drugs, such as the barbituric acid derivatives, either alone or in combination with codein. If these preparations fail to secure rest, I do not hesitate to turn to the judicious use of morphine. For years there has been a divided opinion in the medical profession concerning the use of the latter in patients with this condition. Many have contended that full doses of morphine always have a harmful effect because they depress the respiration, decrease the minute volume of inspired air, and increase abdominal distension. More recent studies⁷ demonstrate that morphine will increase cyanosis and will also diminish the oxygen saturation of the arterial blood. It is, therefore, a drug which should be used with caution. On the other hand, the combination of various hypnotic drugs such as barbital, luminal and sodium amytal with codein is not adequate in all cases to control pain and secure rest. A decision must then be made in each individual case, either to give morphine and secure rest regardless of the harmful effects of the drug, or to avoid its untoward effects by withholding it and sacrificing rest and sleep. Under these circumstances, in my experience, the decision has usually been in favor of morphine. It is my conclusion, therefore, that morphine is indispensable in some cases but it should be used only when other sedatives and hypnotics fail, and then with great discrimination. The untoward effects of morphine are sometimes very slight, but if cyanosis is marked and breathing labored, its depressing effect on the respirations may be minimized by administering 7½ grains of caffein-sodium benzoate intramuscularly or by placing the patient in an oxygen tent in which a five per cent carbon dioxide mixture is maintained as a stimulant to the respirations.

In conclusion, let me say that I have made no attempt to give a complete outline of the practical treatment of pneumonia and I real-

ize that many important phases of therapy have not been mentioned. It has been my endeavor to discuss several aspects of the treatment about which there has been considerable controversy. Careful observation of a large group of patients has, in my opinion, definitely settled these questions as I have previously indicated.

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THE TREATMENT OF FACIAL WOUNDS DUE TO MOTOR ACCIDENTS*

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The present annual toll of more than a million victims injured in motor accidents in this country entitles this surgical problem to our best thought and skill. Facial injuries are sustained in a large proportion of these accidents. A resulting ugly facial scar may ruin a man or woman's social and business ambitions, injure a hospital's reputation and have more far-reaching effects than generally considered. The great increase in very severe facial injuries seems to be due, largely, to three causes in particular:

- (1) The great increase in travelling speed.
- (2) The increase of 100 per cent to 300 per cent in intoxicated drivers.
- (3) The low seats and high instrument boards of the modern automobile, against which the face of the guest passenger is dashed in case of accident.

For convenience, I propose to consider the treatment in three phases: First, the skin wounds; second, fractured facial bones; and third, the subsequent correction of the deformities produced by such crushing injuries.

Skin wounds may vary from slight bruises to multiple lacerations or actual severance of large skin areas. Lacerations are common and are often thoughtlessly and hurriedly treated by doctor or interne with little regard for the possible after effect on the patient. Carrell has shown that small

particles of foreign material and blood clots in a wound greatly increase the possibility of infection. Therefore, a thorough wound cleaning and hemostasis is essential and, as a further precaution, drainage should be provided in deep wounds.

Suturing.—Heavy sutures, skin clips, et cetera, have no place in facial surgery. The edges of each facial wound should be meticulously straightened and sutured with fine materials such as horsehair in a manner so that the edges of the wound are brought in exact union—not simply approximated. In my hands, subcuticular stitches produce the most ideal results. If interrupted sutures are used, they should be removed in from thirty-six to forty-eight hours if possible.

Actual skin losses should be replaced as early as possible. Skin grafts should be of a color and texture which matches the face. Small grafts can be obtained from the upper eyelid or back of the ear without leaving

*Read before the 114th Annual Meeting of the Michigan State Medical Society, Battle Creek, Sept. 13, 1934.

†For professional note see *Journal M.S.M.S.*, January, 1932.



Fig. 1 (left). Deep forehead laceration. The wound was cleansed thoroughly and the edges meticulously straightened. Deep structures were approximated with chromic 000 catgut. Skin was closed with intra-cuticular dermal sutures and intra-cuticular horsehair just beneath the epithelium. Horsehair stitches were removed in forty-eight hours and dermal in six to ten days.

Fig. 2 (right). Result six months after injury. The scars are scarcely perceptible and there are no stitch marks showing as would have been the case if coarse suture materials were used as interrupted sutures.



Fig. 5 (left). Windshield glass severed a small portion of the tip of this nose, forming an extra nostril on top. It was replaced later by a full thickness graft of upper eyelid skin placed over the surrounding scar tissue turned in and stitched in place to form a base for the graft.

Fig. 6 (right). Several months later, the pink glow which often is present in a new graft had disappeared and the color match is excellent. Skin other than face skin would have left a whitish patch of skin.

conspicuous scars. Larger areas will probably have to be delayed for more extensive plastic operations. Occasionally, a portion severed or practically severed can be re-sutured and with carefully applied hot dressings can be revived and made to "take." (Figs. 1 to 8.)

The terrific speed of travel combined with the high windshield and cowl of the modern car has been responsible for an ever increasing number of very severe crushing facial injuries and it is this type of injury in particular, to which I wish to direct your attention.

In case of a collision, the driver can often protect himself by gripping the wheel, but if he happens to be asleep, his face often is crushed against the steering post and he sustains what we have termed a "steering post injury." (Fig. 9.)

Often, the chin is badly lacerated, the



Fig. 3 (left). A "V" shaped cut almost severed this entire nose. The nasal bridge was badly comminuted and the internal canthal ligament torn loose in each eye. These were sutured together with chromic gut extending across through the nose. The nasal bone fragments were replaced and the wound closed with subcuticular stitches.

Fig. 4 (right). Scars are quite fine lines—there is some spreading between the eyes, but they function properly. The nasal bones, though badly comminuted, seem to have healed kindly so that a fair nasal bridge remains.



Fig. 7 (left). Glass cut an olive-sized section of the skin from the bridge of this nose. The wound was kept clean with sterile vaseline dressings. Forty-eight hours later, a full thickness graft was removed from the posterior aspect of the ear and sutured in place. Sponge pressure dressings were applied.

Fig. 8 (right). Patient, six months later. Graft matches nicely and no tedious flap transfers were necessary because of early Wolfe graft. Ear cartilage will be inserted later to raise the bridge slightly at this point.

lower teeth knocked inward or out entirely and the mandible fractured at the condyle region or the cuspid region. Should the blow be on the upper lip and upper jaw, lacerations are usually present together with anterior tooth injury or loss and often a complete transverse fracture of the upper jaw. The maxilla appears to be dropped down and backward and hanging by the mucous membrane. (Fig. 10.)

Occasionally the steering post strikes even higher and the nose is crushed or, if

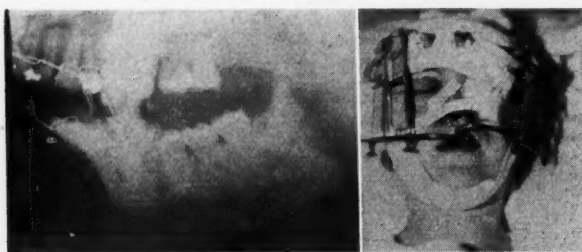


Fig. 9 (left). Typical steering post injury. Fracture of both necks of the condyle of the mandible; bilateral fracture in the bicuspid region and decided retro-position of entire mandible. Extensive chin lacerations usually accompany such an injury.

Fig. 10 (right). Typical guest passenger injury—crushed nose, maxilla, malar bone and laceration of left eye, causing its loss. Plaster head cap and maxillary splint with side arms were used to hold up the maxilla.

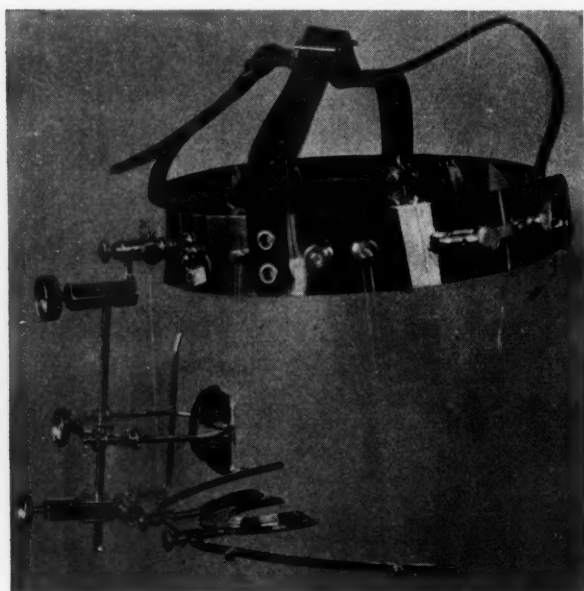


Fig. 11. Author's apparatus for treating fractured facial bones. Headband with anterior and lateral binding posts and knobs for elastic suspension of maxillary splint, adjustable nasal assembly for elevation of bridge and compression of sides of the nose, maxillary splint adjustable to different sized jaws with fixed side arms for upward traction.

the blow is received somewhat laterally, the malar bone is fractured.

The most severe injuries, however, are usually received by the guest passenger in the front seat. Unfortunately, these are, in eight out of ten cases, young girls and women. In the event of a sudden collision, their faces are thrown violently against the upper edge of the instrument panel and usually a severe crushing injury to the middle third of the face results from the impact. The upper jaw is usually fractured, nasal bones are crushed downward and outward, cheek bones forced inward and, not infrequently, the eyeball or frontal bones are injured. This combination of injuries is so

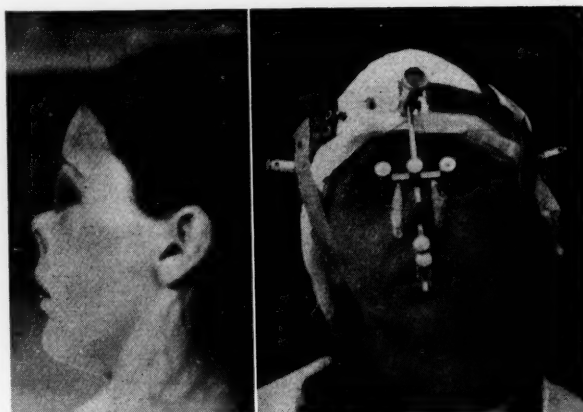


Fig. 12 (left). Badly crushed nasal bones and frontal sinus outer table were elevated forty-eight hours after injury.

Fig. 13 (right). Appliance adjusted maintaining elevation of nasal bones and lateral pressure to crushed sides. Unfortunately, unavoidable pressure over frontals somewhat depressed the frontal bones again.

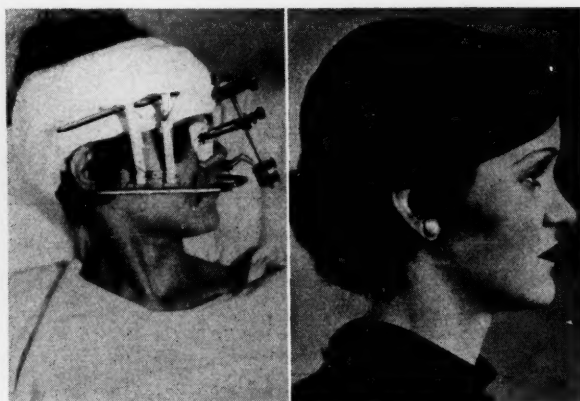


Fig. 14 (left). Plaster head cap makes excellent firm attachment for nasal appliance. Nasal bones were held up and lateral pressure applied by appliance. Maxillary splint was held up by elastic traction to coat hanger wire attachments embedded in plaster cap. Light elastics should be used or an impaction of the maxillary fracture with over correction may be produced.

Fig. 15 (right). Profile view six months after patient was treated for crushed nose and maxilla. The teeth are in excellent occlusion and the nose is well formed.

typical that we have called them "guest passenger injuries."

These injuries are occurring with such frequency nowadays that it is presenting an almost new surgical entity and, unless properly treated, these injuries leave very grotesque deformities, and even with the best treatment the resulting disfigurement is often considerable.

Treatment.—One should always suspect a skull fracture in these severe facial injuries and the examination and emergency treatment should be done with great care and depend entirely upon the general condition of the patient. With this in mind, I believe it is well to make the early diagnosis of the

fractures by manual examination rather than submit such patients to the necessary moving to secure good x-rays. These can be taken when the condition of the patient warrants it. Palpation around the rims of both orbits simultaneously will usually disclose the site of a malar bone fracture. This is often associated with flattening of the cheek, anesthesia of the side of the nose and upper lip and, occasionally, the impingement of the zygoma on the coronoid process restricts the mandibular movements.

Many different methods have been suggested to elevate depressed malar bones. A large towel clip passed through the skin of the lower lid and cheek, grasping the malar bone, can often be used to elevate the bone into position. The author usually prefers to use a heavy antrum trochar passed through the oral mucous membrane above the last molar tooth and behind the malar. Upward traction guided by external manipulation of the bone with the other hand will usually reduce most fractured malar bones. If the reduction is done early and the fragments made to overlap the maxillary edge, the bone will usually stay in place, but if reduction is delayed, the fractured edges become smooth and other methods may be resorted to to maintain the proper reduction.

In my hands, the method of Gill has accomplished excellent results. This consists of making an external incision over the frontal attachment, drilling a hole therein and also in the malar and wiring the parts together with silver wire. Kazanjian has drilled a hole through the infra-orbital rim, passed silver wire through and held the bone up by an external attachment to a head appliance. One general essential in all malar bone and maxillary fractures is that ample drainage of the antrum be provided either under the inferior turbinate or into the mouth through the canine fossa. These fractures are all potentially infected and the blood clots filling the antrum provide excellent media for growth unless drained out. The drainage in all these cases should also be encouraged by frequent nasal shrinking with some astringent.

Nasal injuries are very common in severe motor injuries and may be simply skin lacerations, partial severance or compound comminuted crushing injuries. The great problem in treating the crushed nose is in maintaining the fragments in proper posi-

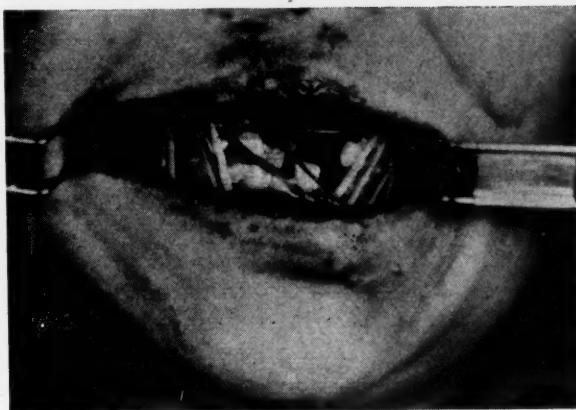


Fig. 16. Maxillary fractures unite rapidly, therefore the occlusion should be carefully watched. Malocclusion can be corrected by early elastic traction between dental arches if proper directional pull is exercised. This traction should usually be started after about two weeks of maxillary fixation.

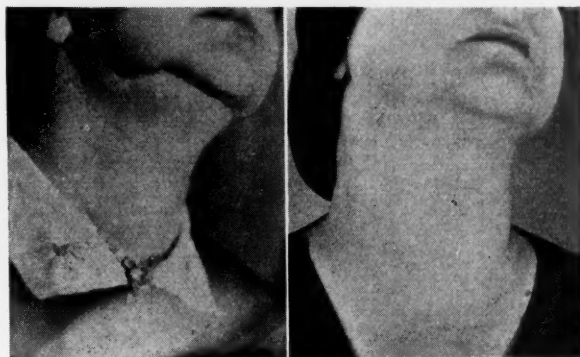


Fig. 17 (left). Depressed scar from steering post injury. The jaw was fractured and several draining sinuses resulted. Adherent scar was the result.

Fig. 18 (right). Scar was excised and carefully resutured with subcuticular stitches. Such scars are often sources of great embarrassment and should be corrected if possible.

tion after elevating and shaping the nasal framework. This has been simplified by the use of the author's appliance which maintains the elevation and also later compression without packing the nostrils to interfere with drainage. (Fig. 11.)

As soon as possible after the injury, the nasal bones are elevated under local anesthetic and a metal or plaster head cap applied. The nasal appliance can then be attached. The intra-nasal rubber covered arms are introduced and the nasal bones elevated by turning the proper thumb screw. The lateral nasal walls are usually spread out and these can be reduced and held in place by the lateral pressure appliance. This appliance need only be worn for one or two weeks in most cases although in some patients there will be some dropping of the nasal bridge no matter what measures are employed. Pressure sores should be guarded against by ad-

justing the lateral pressure pads. (Figs. 12 and 13.)

Fractures of the maxilla must also be handled in combination with nasal fractures

turned over to the laboratory for splint construction. Temporarily the author's adjustable splint can be introduced with or without modeling compound and the side arms held



Fig. 19 (left). The tip of the nose was severed by flying glass. A forehead flap with temporal artery in its center was elevated and resutured to the forehead.

Fig. 20 (center). Three weeks later, forehead flap transferred to nose. The flap was severed in seventeen days and balance returned to the forehead. The denuded forehead was skin grafted.

Fig. 21 (right). After several small shaping operations, the appearance of the nasal tip was quite satisfactory. Hair was combed over the forehead to hide the scar and skin graft.

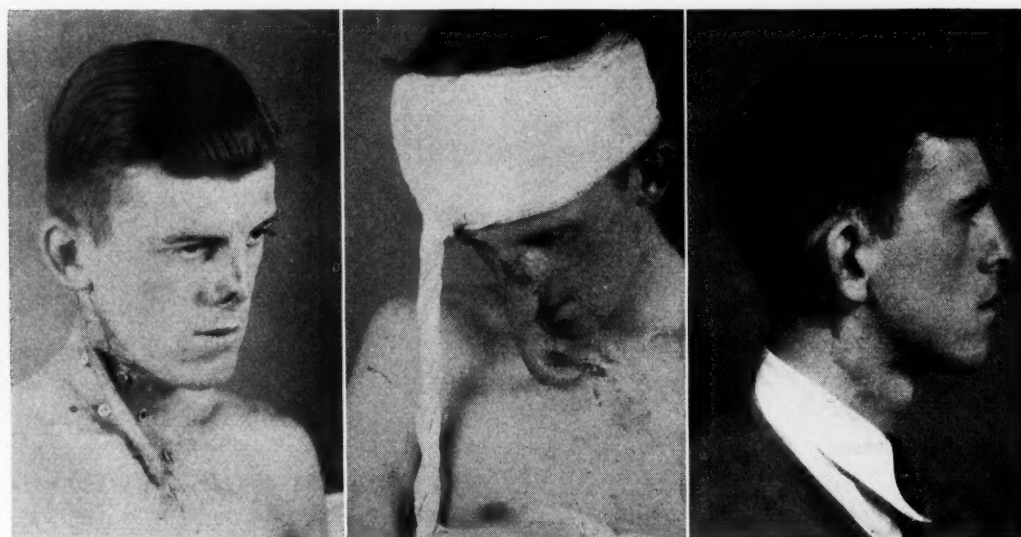


Fig. 22 (left). For nasal losses in men, the author transfers the skin just below the ear. A tube pedicle flap is made over right sterno-cleido mastoid muscle to sternal notch, and the transfer delayed for three weeks to establish circulation.

Fig. 23 (center). Scar tissue turned in for lining and skin beneath ear transferred to nose. Head cast connected to chest cast holds head in proper position for seventeen days.

Fig. 24 (right). This skin makes an excellent repair. The color is good, skin is thin and easily shaped, practically hairless and no scar is visible on the face. The neck scar is seldom noticed.

in many cases. The diagnosis is usually evident by finding a lowered, movable maxilla on oral examination. To elevate this bone and maintain it in the proper position, a special splint should be constructed with a rigid side arm attachment for extra-oral attachment. Impressions of the upper teeth should be taken at the first examination and

upward by elastic traction to the head cap. (Figs. 14 and 15.)

In the event that these special facilities are not available, the upper teeth can be wired to the lower and the chin held up with an elastic or firm bandage. This is often very unpleasant for the patient, however, because of the intense facial swelling, in-

ability to breathe through the nose, etc. The upper jaw should unite in most cases in from two to three weeks, but frequent examination should be made of the occlu-

can be utilized to make an excellent repair. (Figs. 19 to 21.)

In men, however, where a disfiguring scar would be a constant "eyesore" the author



Fig. 25 (left). Guest passenger injury resulted in diagonal cut through nose, crushing nasal cartilages. In spite of treatment, a decided deformity resulted. The maxilla was also fractured in the accident.

Fig. 26 (right). Three months after injury—the scar across nasal bridge was excised, prominence on nasal bones removed and a rib cartilage transplant inserted through the incision on the bridge. The wound closed with subcuticular stitches.

sion and, if this is not correct, proper directional pull with elastic traction from one arch to the other will usually produce the necessary movement to bring about proper occlusion. This treatment, however, must not be delayed until complete fixation has taken place or a permanent malocclusion will result. (Fig. 16.)

Fractures of the mandible, although frequently present in such injuries, are so varied and the treatment so standardized that the discussion of this subject is intentionally omitted.

Delayed plastic operations are often necessary or desirable to improve or lessen the deformities resulting after severe injuries. Scar excisions can be attempted after about eight weeks and frequently by employing painstaking technique and suturing with subcuticular stitches, these conspicuous scars can be minimized to a great extent. (Figs. 17 and 18.)

Actual losses of skin can be replaced by pedicle flaps, but these should be of facial skin wherever possible so that a perfect match may be obtained. Nasal skin losses are often sustained and in women where the scar on the forehead can be covered by the hair, a temporal flap carrying forehead skin

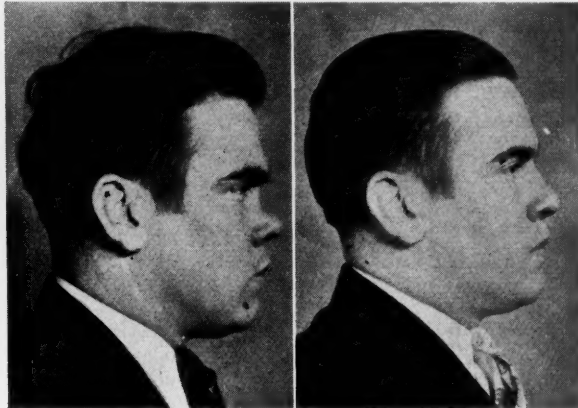


Fig. 27 (left). Accidental injury often results in septal abscess causing decided saddle nose as in this case.

Fig. 28 (right). Prepared rib cartilage transplant introduced through small mid-columellar incision produced marked improvement in appearance. The psychologic reaction is usually very gratifying.



Fig. 29 (left). Crushing injuries to the nasal tip require a support to the tip as well as to the bridge. A hinged cartilage is introduced through columellar lift incision, supporting the tip and lower half of the nasal bridge.

Fig. 30 (right). Result of hinged cartilage transplant. The maxilla is somewhat receded due to a fractured maxilla. The nasal airway is usually improved after such an operation.

uses the skin just beneath the ear brought to the nose on a tube pedicle along the sterno-cleido mastoid muscle from the ear to the sternal notch. This produces an excellent repair with practically hairless skin similar in texture and color to that of the face and leaves a scar in a much less conspicuous place. Similar flaps can be used for other facial repairs when necessary. (Figs. 22 to 24.)

Depressions of the nasal bridge are one of the most frequent sequelæ of crushing

facial injuries and often require plastic operations for their reconstruction. Most authors agree that costal cartilage is the most ideal transplant for such a purpose.

In such a patient, a plaster impression of the face is taken from which a lead model is made, duplicating exactly, the patient's facial contour. This model is boiled with the instruments and after the rib has been removed, a piece of cartilage is fitted exactly to this model. This obviates the necessity of making several trial insertions of the cartilage into the nose and subsequent removal for further fitting. When the piece of cartilage is fitted properly to the model it is slipped beneath the skin of the nose through a midcolumellar incision. (Figs. 25 to 28.)

In case of a depressed lower half and tip of the nose, a hinged piece of cartilage is inserted to support both the bridge and the tip

of the nose. This is best inserted through a columellar lift incision. (Figs. 29 and 30.)

In closing, I wish again to emphasize that the proper care of facial wounds requires infinite care and patience. Haste is incompatible with good results if a minimum scar is to be produced. Those unfortunates who have resulting deformities should not be told to "forget it" for that is impossible to them. They should be encouraged to seek relief for, in the present strife and competition of everyday life, *every asset* is of importance and one of the most important assets is a good physical appearance.

There are very few whose deformities could not be improved somewhat by plastic procedures. Such reconstructive surgery is more than justified and those who have been rehabilitated by it are often more grateful than others who have been literally snatched from the very jaws of death.

THE BIOLOGIC UNITY OF HYPERTENSIVE ARTERIAL DISEASE*

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Hypertensive arterial disease is a distinct and clearly definable entity. Despite extreme variations in symptoms and signs, in clinical course and in local tissue injury, the essential disturbance is fundamentally quite uniform and follows a consistent pathogenesis. Variations in intensity, rate of progression, and location of the more extensive impairment of the circulation cause different clinical syndromes, although the underlying changes are essentially identical. Moschowitz¹⁹ has recently re-emphasized the necessity of considering disease on a biologic basis, with a precise etiology and consistent pathogenesis. Failure to recognize the fundamental biologic unity of the various manifestations of hypertensive arterial disease has led to arbitrary and confusing empirical classification of the many syndromes secondary to the disease.

Hypertensive arterial disease is not necessarily synonymous with arterial hypertension. Undue elevation of the arterial pressure may and does occur independently of hypertensive disease but only relatively transiently. In almost all instances elevation of the arterial tension is attributable to narrowing of the arteriolar bed, either through arteriolar spasticity, or later, fibrotic narrowings. If the arteriolar spasticity be

brief, the arteriolar tonus may return to normal, but if persistent and prolonged, the progressive changes of the pathogenesis of hypertensive disease are initiated. It is not the disease which causes the elevation of arterial tension so much as the hypertension which is responsible for the disease. Allbutt was among the first to stress the importance of physiologic and pathologic arterial stress as important factors in the progression of hypertensive disease. Arteriosclerosis of the larger arteries is an entirely separate entity clinically, etiologically and pathologically. The anatomic site of hypertensive arterial disease is the arteriolar media; arteriosclerosis occurs in the intimal layer of larger arteries.

The pathologic changes of hypertensive disease may be attributed to long-continued

*Presented at the ninth annual clinic of the Highland Park, Michigan, Medical Club, Dec. 5, 1934.

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irritation and stimulation of the spirally arranged smooth muscle fibers of the media of the arterioles.³⁴ These changes occur very gradually and slowly, and result from the long-continued muscular hypertonia. Hypertensive disease is invariably first a purely functional disturbance, a variable hypertonia of the medial musculature, and anatomic changes appear later as a result of the functional disturbance. As in any other clinical phenomena, this arteriolar hypertonicity does not involve any new physiologic mechanism but is an exaggeration of a normal response to continued stimulation. That the anatomic changes in the arterioles are not due to the increased intra-vascular pressure is demonstrated by the absence of such arteriolar lesions in coarctation of the aorta, where a severe hypertension exists above the stenosis but where arteriolar spasticity does not occur.

The etiologic sources of such prolonged arteriolar irritation are many. The etiology of hypertensive disease may be summarized as "anything which persistently irritates or stimulates the arterial structures."³⁴ Almost invariably multiple superimposed insults to the vascular system initiate the progressive changes of hypertensive disease. At first the arteriolar hypertonicity is intermittent and transient, as noted in certain forms of emotional hypertension or "potential hypertensive disease."³⁵ As irritation is prolonged the spasticity of the arterioles becomes more and more continuous and the arteriolar musculature hypertrophies, as would any muscular structure under the influence of increased work. This medial hypertrophy has been clearly demonstrated.¹⁵ Response to nervous stimulation is now exaggerated; the hypertrophied and overly developed media contract more energetically to the normal vasomotor stimuli. The hypertonia thus becomes more and more continuous with resultant rise of the arterial tension.

Muscle fibers are not adapted to continuous contraction. Muscle cells may do tremendous work without undue fatigue if this work be intermittent, as are the cardiac contractions. Continuous hypertonia leads to muscular fatigue. Fatigue reduces the threshold of stimulation and creates a state of hyperirritability of the muscle cells. Fatigue must be sharply differentiated from exhaustion, when the ability to respond to stimulation is lost. The chemical changes associated

with fatigue^{11,34} increase the irritability, and thus further enhance the persistent spasticity. Thus is a vicious circle engendered; fatigue creating hyperirritability which in turn results in more spasticity and fatigue. The habit of excessive contraction becomes firmly established.²¹ This phenomenon may well be termed the "perpetuating factor" in hypertensive disease.^{32,34}

Exhaustion of certain of the muscle fibers is inevitable as fatigue continues. Certain cells become exhausted, degenerate and die, to be replaced by collagenic connective tissue. This degenerative change takes place very slowly and insidiously and at varying rates in different arterioles. The replacement by connective tissue is not an aggressive invasion but a defense mechanism to support the weakening arteriolar walls. Simultaneously some intimal fibrosis occurs. Destruction of any mesenchymal tissue is followed by just such replacement fibrosis. Gradually, over a period of years, the fibrosis results in an extensive arterio-sclerosis. Arterio-sclerosis is the end-point of the pathogenesis of hypertensive disease: permanently semi-rigid, scarred arterioles which are unable to relax. It must be emphasized that this whole pathogenic process is extremely slow, often requiring many years for full development, but it is also terribly persistent. The rate of progression varies in different structures and in each individual;²² in any single instance of long standing hypertensive disease almost all stages of arteriolar changes are to be found.

This concept of the pathogenesis of hypertensive arterial disease can perhaps be clarified by the accompanying diagram. Such schematic representation of a complex series of physiologic changes naturally is not entirely complete nor proven, but it supplies a logical and useful working hypothesis which correlates the many factors of hypertensive disease by pathogenetic unity.

The clinical aspects of hypertensive disease are many and varied, and sometimes apparently conflicting. When interpreted on the basis of this conception of the pathogenesis these apparent conflicts are erased and the true underlying mechanism explains much that was obscure. There exists a very close mutual and reciprocal inter-relation between the pathogenesis of this disease and the many clinical aspects. Correlation of the

pathologic physiology with the clinical features inevitably clarifies confusion and makes for better diagnosis, therapy and prognostication. I wish to consider briefly certain of the more significant clinical implications of the pathogenesis, particularly in connection with the following aspects of the problem: etiology, progression, variation in location of involvement, cardiac involvement, phases of the disease, evaluation of the prognosis and therapy.

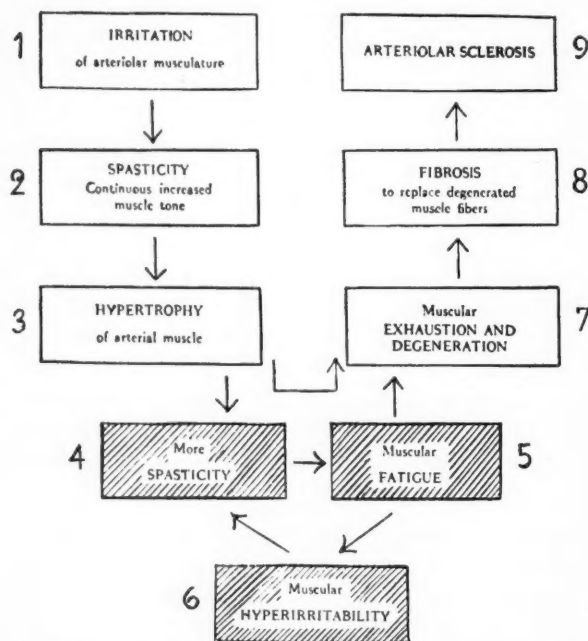


Chart 1. Probable pathogenesis of hypertensive arterial disease. The shaded portion of the diagram represents the vicious circle of fatigue, the "perpetuating factor" in hypertension. Up to the point of muscle degeneration (Step 7) the processes are reversible; beyond that point irreparable. (From reference 34, with permission of the publisher, Paul B. Hoeber, Inc., New York.)

The etiology of hypertensive disease is multiple. The pathogenesis directly implies that the initiating etiology may be *any* prolonged arteriolar irritation. Search for one single, invariable cause for hypertensive disease is futile and doomed to failure. Each instance of the disease presents an individual problem. Careful etiologic study of each and every case is essential.¹² Unfortunately, the extremely insidious asymptomatic early course of the disease makes accurate etiologic diagnosis difficult; at the time the initiating factors are operative the patient feels subjectively well. Because the majority of cases are not seen until late in the course of the disease, it is often impossible to do more than gain a rather vague impression of the *probable* etiologic factors. There is urgent

need for much further study of the earlier, symptomless stages of this disease.

Clinical experience reveals that in most instances of hypertension several contributing factors are superimposed.^{26,34} The causation of hypertensive disease involves influences which fall in two major divisions: inherent constitutional vulnerability and long-continued arteriolar stimulation which provokes the progressive changes just outlined. The pathogenesis itself may be responsible for the self-perpetuation of the disturbance. Almost invariably several contributing factors are superimposed.^{26,34}

Constitutional factors include diminished endurance of the vascular structures ("poor rubber"), hereditary premature senescence, hyper-irritability of the sympathetic nervous system, instability of emotional temperament, hypersthenic physique, and constitutional endocrinopathies such as virilence and thyrotoxic constitution.

Provoking factors may be divided into intoxications, infections, and neurologic influences. Intoxications may be endogenous or exogenous. Endogenous sources of prolonged arteriolar stimulation include fatigue, metabolic disturbances such as hypocalcemia, the climacteric and hyperepinephrinemia, pregnancy, anemia and nephritis. The commoner exogenous intoxications are chronic metal poisoning (especially lead and arsenic), dietary irritants, excesses of condiments, and an inadequate intake of fluids.

Infections responsible for the initiation of hypertension may be either focal infections of long duration or generalized and acute. Of the latter type, influenza and typhoid fever are especially significant. Syphilis is rarely a factor.^{23,34}

Neurologic stimulation of the arterioles may follow increased intracranial pressure from any source, or be subsequent to long-continued worry and emotional stress. Such consideration of the known etiologic influences is by no means complete. Many other factors are suspected of etiologic association, and undoubtedly there are still others of which we know nothing as yet.

The duration of irritation of the arterioles is of the greatest importance. Transient stimulation results in arterial hypertonia but not in the progressive disease here under consideration. The acute hypertension of eclamptic intoxication rarely continues after abatement of the intoxication.^{38,40} Acute

nephritis with hypertension may result in medial thickening but if the intoxication subsides this hypertrophy recedes.¹⁸ Infection is chiefly of etiologic significance if prolonged; neglected foci of infection are more frequently implicated than more active, but transient, infections. It is evident from the diagram that the disease does not become self-perpetuating until arteriolar fatigue becomes significant and that implies *prolonged* hypertonicity. Prior to Step 7 in the diagram the processes are reversible, beyond that point, irreversible. Consideration of the pathogenesis thus illuminates three significant aspects of the etiology of hypertensive disease: the inevitable multiplicity of initiating factors, their obscurity due to the slow and insidious early course, and the importance of duration of irritation in contrast to intensity.

True hypertensive disease is progressive and shows little or no tendency to spontaneous remission.²⁴ Once fully started by prolonged arteriolar irritation the pathogenic progression is apparently self-perpetuating. Hypertensive disease is not "self-limited." Development is usually very slow but dreadfully persistent, even though many of the original initiating factors may have ceased to exist.³⁴ As illustrated in the diagram, this tendency to progressive development may be attributed to the vicious circle created by arteriolar fatigue (shaded portion of diagram). Recognition of this factor is essential for adequate curative therapy: it does not suffice to attack only the primary etiologic factors and prolonged rest of the arterioles is necessary to overcome this "perpetuating factor." It must also be recalled that constitutional factors in the etiology are usually permanent and not amenable to therapy.

The rate of progressive arteriolar degeneration varies greatly in different individuals, but the successive phases of the development are essentially identical.^{15,22} Unusually rapid progression results in so-called "malignant hypertension." The only appreciable differences of this type from the usual form are quantitative, not qualitative. The reasons for this variability in rate of progression are not clear. In all probability the chief variant is that undefinable something: susceptibility. The nature of the primary etiologic factors plays a determining rôle; the duration and intensity of arteriolar ex-

citation may vary markedly. Age is also a factor; in general, it may be said that the earlier the age of onset of hypertensive disease the more rapid the progression. It is, of course, impossible to accurately differentiate the significance of these variable factors. Superimposition of new arteriolar excitation leads to relatively acute exacerbation of the hypertension and accelerates the appearance of degenerative changes. Notable among such instances is the marked and permanent exacerbation of pre-existent hypertensive disease by the intoxication of pregnancy.^{38,40} The pathogenesis, then, explains the persistently progressive nature of the disease and is entirely consistent with variations in rate of development.

The progression of this disease does not proceed at the same rate in all the arterioles of the body, nor is the spasticity uniform throughout. There are certain areas in the vascular tree which appear to be particularly vulnerable. In different individuals different areas may reveal exaggeration of the arteriolar disease. Local angiospasm cause many variable syndromes,²⁸ depending largely upon the site of the disturbance. Angiospasm of the coronary vessels may result in typical angina pectoris,^{13,28} vascular disturbances in the pulmonary circulation may cause acute pulmonary edema, cerebral spasms result in most variable phenomena, such as aphasia, convulsions, monoplegia or paresthesias.^{28,34} The degenerative changes may also vary markedly in intensity in different areas. It is as a result of this that the fundamentally basic disturbance becomes clinically subdivided into divers syndromes. No adequate explanation has yet been presented of why the evolution of hypertensive disease may affect various areas with greater intensity.

Certain areas appear to be sites of marked predilection; the renal vessels are almost invariably involved, sclerosis of the splenic arteries occurs in about two-thirds of hypertensive patients, the pancreatic arterioles in about one-half, and the cerebral vessels in one-fifth.⁹ Involvement of the coronary arterioles is very frequent.^{34,41} Marked arteriolar fibrosis of the cerebral vessels results in apoplexy, retinal involvement in retinitis^{10,16} coronary involvement in myocardial insufficiency, coronary occlusion or angina pectoris, pancreatic sclerosis in diabetes (senile types), and renal involvement

in nephrosclerotic nephritis.¹⁹ Thus many quite distinct syndromes may have as a common basic pathogenesis the progressive disturbance of hypertensive arterial disease.

These syndromes are all fundamentally due to a common failure: local histanoxia²⁸ or tissue ischemia resulting from inadequate circulation. Hypertensive disease *per se* is asymptomatic;³⁴ those symptoms which do appear later are secondary to the circulatory failure of this or that structure. Local ischemia or histanoxia is the cause of cardiac, cerebral, or renal pancreatic injury. Any other coincident handicap to tissue respiration, such as anemia, greatly exaggerates such injury.^{4,34} It is entirely unnecessary and illogical to assume that these many syndromes represent separate entities; the pathogenesis and mechanism are the same in all, only the site of maximum injury varies.¹⁹

There exists a curious paradox between pathologic and clinical observations. Although sclerosis of the renal arterioles is almost invariably present in long standing hypertensive disease, renal failure accounts for but about 10 per cent of deaths attributable to hypertension.²⁰ On the other hand, cardiac failure is responsible for about 60 per cent of such deaths.³ Cardiac exhaustion, or defeat, is the chief cause of disability and death in hypertensive disease.⁷ This discrepancy between the clinical and anatomic necropsy findings may be explained by consideration of the pathogenesis. The cardiac reserve is depleted by other factors as well as local ischemia.

It is a justifiable clinical concept to assume *a priori*, that in every instance of prolonged hypertension some cardiac damage exists.⁴² This inevitable cardiac involvement is due to several synergic etiologic factors. Of the greatest importance in the etiology and mechanism of cardiac injury in hypertension is the greatly increased burden of cardiac work. Elevation of the diastolic pressure is synonymous with increased peripheral resistance against which the heart must work. Thus the left ventricle must continuously exert itself excessively.⁸ The higher the diastolic tension, the greater the cardiac burden.³⁴ It is thus not surprising that left ventricular fatigue eventually becomes exhaustion.⁶ Furthermore, the site of hypertensive disease is in the media of the small arterioles. The myocardium is medial musculature, embryologically, struc-

turally and functionally, as the endocardium is continuous with and synonymous to the vascular intima. The myocardium is thus subject to, and vulnerable to, the same sources of injury which initiate and perpetuate the hypertensive disease. These considerations do not apply to the renal parenchyma.

Besides myocardial fatigue and direct damage as implied by the pathogenesis, a third major source of cardiac injury is the nutritional one. Not only is the left ventricle required to carry an excessive burden of work, but it must do this under conditions of impaired coronary circulation with diminished efficiency of tissue respiration. Reduced oxygen supply and inadequate removal of the products of catabolism add greatly to the injury. Not infrequently does hypertensive disease also involve the pancreas with resulting impairment in the utilization of glucose. Glucose is the chief source of cardiac energy and any such impairment is of serious moment.^{29,41} Recent investigations^{17,31,45} reveal how necessary are relatively high blood sugar levels to the elderly arteriolar-sclerotic individual.

Consideration of the pathogenesis also assists in understanding the clinical aspects of the cardiac reserve in hypertension. The cardiac reserve goes through three successive stages: first a sthenic phase, later a period of asthenia or reduced reserve, and finally cardiac decompensation. The first or sthenic phase occurs when the burden of cardiac work has been increased by the diastolic hypertension, before the myocardium has been extensively injured by coronary inadequacy, etc. As is true of any muscular structure, hypertrophy and increased vigor are the response to increasing work; such compensation is always in excess of the requirements. At this stage the heart is vigorous and strong, the pulse slow and the response to effort good.³⁴ Later, as compensation is no longer able to keep pace with the gradually but constantly increasing demands, myocardial fatigue ensues, the handicap of coronary disease becomes manifest, and the cardiac reserve is gradually, almost imperceptibly, diminished. The pulse becomes more rapid, the heart somewhat larger, the left axis deviation of the electrocardiographic tracing more marked, and dyspnea may be noted on gradually diminishing degrees of effort. This period of impaired reserve may

persist for many years before final decompensation occurs as the result of ever increasing insults and mounting burden. The mechanisms of cardiac failure⁴¹ do not concern us here. The functional changes in the heart are thus quite parallel to those of the arterioles as described in the pathogenesis of hypertension.

Despite the greatly augmented left ventricular burden, cardiac hypertrophy is usually surprisingly slight and very slow.¹ One may tentatively suggest that this is in part attributable to the late age of onset of the cardiac overload in contrast to the situation in rheumatic or luetic valvular disease or congenital defects. Diastolic hypertension is said to increase the coronary flow³⁰; thus the coronary impairment is less than in aortic regurgitation, which is characterized by excessive left ventricular hypertrophy.

During the slow, gradual pathogenesis of hypertensive disease the disease passes through several rather distinct phases. These are not sharply demarcated, but are clinically distinguishable and correspond closely to the major pathogenic phases. At the onset of the disease (Steps 1 and 2) the arterial tension is extremely labile and variable, but may return to normal levels upon correction of the source or sources of arterial irritation. This phase is illustrated by emotional hypertension,³⁵ eclamptic hypertension^{38,40} and in thyrotoxicosis. We may well designate this phase as potential hypertensive disease.

Later, when the hypertonia has existed for some time and the habit of arterial spasm has resulted in medial muscular hypertrophy (Steps 3 to 6), the elevation of the arterial tension is more persistent although still widely fluctuant. Mere eradication of the initiating etiologic factors does not suffice in arresting the progression; the "perpetuating factor" of arteriolar fatigue is now operative. With active vasodilators the tension can be temporarily brought to normal, but promptly rises again. This phase is best designated as the spastic stage.

With the gradual insidious development of degenerative changes (Steps 7 to 9) the arterioles become fibrotic and lose their power of independent contraction and relaxation. The arterial tension, particularly the diastolic tension which represents the peripheral resistance, becomes relatively rigid

and fails to fall under any therapeutic management. These changes are permanent, irrevocable, irreparable and non-amenable to therapy. This phase, clinically and pathologically distinct, may be designated as the sclerotic stage.

The parallelism between these clinical phases and the steps in the pathogenesis is obviously very close. However, as previously pointed out, the disease does not progress uniformly throughout the body and thus in any one patient sclerosis in certain arterial areas may coexist with arteriolar spasticity elsewhere. The stages overlap.⁴³

The prognostic implications of the pathogenesis are significant. It is obvious that the amenability to therapy depends largely upon the stage of pathogenesis. Spasticity is relaxable, hypertrophy of the muscle subsides with lessened use, fatigue is amenable to the influences of rest and hyperirritability may be overcome. On the other hand, scarred, fibrotic arterial walls are *not* relaxable, the degenerative changes are irrevocable. Clinical diagnosis of the phase of the disease or the degree of permanent fibrotic scarring can be made with considerable accuracy. The duration and intensity of the hypertension are entirely inadequate guides to the extent of probable sclerosis; the disease may remain in the spastic phase for many years or progress to sclerosis relatively rapidly. The degree of fluctuation, particularly of the diastolic tension, as observed repeatedly over a long period of time, serves as a valuable aid. The same information may be obtained more rapidly by noting the degree of arteriolar relaxation induced by a transient, active vasodilator such as amyl nitrite or nitroglycerol.^{36,42} Spastic arterioles can be at least temporarily relaxed by the inhalation of amyl nitrite, whereas sclerotic vessels can not. By noting the approach of the diastolic tension toward or below normal, it is possible to gauge quite accurately the average degree of arteriolar sclerosis. This amyl nitrite test for determining the phase of hypertensive disease has proven to be of great clinical value, especially in evaluating the amenability to therapy in any specific instance of disease.^{36,42,44} As is true of any clinical test, the interpretation of the observed findings is the most important element.

Evaluation of the status of the cardiac and renal function reserves are also neces-

sary to wise prognostication. Extensive *local* injury may markedly darken the outlook despite the fact that the majority of the arterioles are relaxable. Especially is this true when cerebral or coronary sclerosis is marked. Direct inspection of the retinal arteries by ophthalmoscopic examination may yield invaluable data anent the extent of sclerotic change in the ocular and cerebral vessels.^{10,16} The average relaxability, as revealed by the amyl nitrite test, does not necessarily parallel the local findings (ophthalmoscopy) because of the variable rate of progression in different areas.

As successful curative therapy must inevitably be based upon etiology, the etiologic background must be considered in evaluating the prognosis. Certain etiologic factors are amenable to therapy; others are not. A marked familial tendency to hypertensive disease affects the prognosis adversely.

The concept of the pathogenesis illustrates why hypertension *per se* is a menace. The increased arterial tension is the source of vascular fatigue and thus significant in the perpetuation and progression of the disturbance. Hypertension as a clinical phenomenon is not to be ignored, but is an urgent indication for therapy directed against the hypertension itself. The idea that elevation of the arterial tension in hypertensive disease is a compensatory phenomenon⁴⁶ is incorrect. The renal and cardiac circulation is clearly more efficient following gradual reduction of the hypertension.³⁶ Some of the other risks of hypertension have been mentioned.

The logic of therapy in hypertensive disease is intimately correlated with and dependent upon an understanding of the pathogenesis. The primary objective is interruption of this pathogenic progression and return of the circulatory mechanism to normal. Whether the changes are reversible under therapeutic attack, or have become irreparable, depends largely upon the phase of the pathogenic progression. Reduction of the arterial hypertonia, irrespective of the cause, is most surely indicated, as the hypertension itself is of major significance in perpetuating the disturbance. The pathogenesis, however, reveals that the progressive increase in arterial tension is very slow and that much compensatory change takes place during the years of gradual develop-

ment. It is thus implied that the reduction in arterial tension should also be gradual. Clinical experience has emphatically confirmed the advisability of gradual reduction; rapid fall may cause considerable distress, especially by creating a cerebral anemia through relative hypotension.³⁴ Relative hypotension is most exceptional if the reduction in pressure is gradual and the approach to normal levels a question of weeks rather than hours or days.

In instances of long standing disease where arteriolar sclerosis exists, a moderate hypertension may be necessary to maintain adequate tissue nutrition. Reduction to theoretically normal levels is therefore not always wise; the determining factor is the degree of irreparable damage in the pathogenesis.

The therapeutic objective is not merely transient reduction of the tension; that is easy and relatively futile except in acute vascular crises.²⁸ The objective is arrest of the progression and protection against the *future*. Adequate therapy must be prophylactic in viewpoint. A man of fifty with an arterial tension of 160/100 is in no immediate jeopardy, but unless the progression is halted, the grave menace of severe hypertensive disease is later inevitable.¹⁴ It must be born in mind constantly that the constitutional tendency remains and that recurrences and exacerbations are initiated by relatively minor insults. The pathogenesis thus emphasizes several significant therapeutic considerations: the desirability of reducing the tension, the necessity of gradual reduction; the advisability of reduction to optimum levels rather than to a theoretical norm and the essential importance of continued prophylactic therapy early in the course of the disease.

Logical curative therapy must be based upon etiology and an understanding of the pathologic processes.^{34,43} All curative therapy is based upon three fundamental principles: (1) Removal or amelioration of the source or sources of injury (etiologic therapy); (2) reduction of the functional burden of the injured structures; and (3) enhancement of the opportunity for recuperative rehabilitation through maintenance of optimum conditions of tissue nutrition and respiration.⁴³ In the management of hypertensive disease these three principles of therapy are particularly applicable; the

omission of any one of the triad results in inadequate therapy.

Application of the first principle is obviously dependent upon recognition of the etiologic factors. The necessity for a painstaking etiologic analysis of every case of hypertension is apparent; no two patients necessarily present the same etiologic picture. It is often most difficult to gain more than an impression of the probable factors because of the obscurity of time and the multiplicity of factors. Nevertheless, should any active etiologic factors be elicited, the first step in successful therapy is their correction, whenever feasible. The correction of chronic plumbism, oral sepsis, unwise dietary or thyrotoxicosis may be cited as examples.

The initiating factors may be non-amenable to correction (constitutional factors) or have ceased to be operative. The disease perpetuates itself largely because of arteriolar fatigue. It is thus of vital importance that the physiologic burden of the injured structures (the arterioles) be reduced. It does not suffice that the hypertonia be transiently relaxed, for arteriolar relaxation must be gradual, *persistent* and *prolonged* so that prolonged *rest* may break the vicious circle of fatigue, hypertrophy and hyperirritability. Prolonged arteriolar sedation^{32,34,37} serves two purposes: causes reduction of the arteriolar tonus and the blood pressure, and permits of arteriolar rest so that the effects of fatigue are reduced and the muscular hypertrophy may subside. It has been demonstrated⁴⁴ that sufficient duration of such mild arteriolar sedation will cause the arterial tension to remain *permanently* lowered if no active initiating factors are neglected.

As yet, no wholly satisfactory, mild but persistent arterial dilator drug has been made available. Bismuth subnitrate^{5,32,33,34,37,44} is frequently effective, but is often too mild; potassium thiocyanate is toxic³³ and the soluble nitrites far too fleeting in their effects. We may predict, however, that the future management of hypertensive disease will center about some form of medication inducing mild, persistent and prolonged arteriolar relaxation to permit of prolonged arteriolar rest. Time is a vital factor. If the anatomic and functional changes of hypertensive disease are to be reversed, ample time must be allowed. Hypertrophy of muscles will subside with relative disuse, but

very slowly. The earlier in the course of the disease that such management is instituted the more prophylactically effective will it be.^{14,34}

It is illogical to anticipate repair and rehabilitation from tissues receiving an inadequate supply of oxygen and food. Correction of anemia, support of the myocardium and maintenance of proper nutrition are important. Too radical restriction of the dietary is unwise.

It has been our object to point out the fundamental biologic unity of all the many aspects of hypertensive arterial disease by their consideration in the light of a consistent and fundamental pathogenesis. Correlation of the pathogenesis with the clinical problems illuminates much in connection with the etiology, the progressive nature of the disease, its variable course and variable sites of predilection, its distinct stages, the inevitable cardiac involvement, the evaluation of the prognosis and the logic of its therapy.

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A SUGGESTION FOR THE CLASSIFICATION OF CERTAIN ALLERGIC DERMATOSES*

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In an article recently submitted to the *Journal of the American Medical Association*,⁴ a tentative classification of allergic dermatoses was suggested. This classification is based upon: (1) the site of the shock-tissue—epidermis or cutis; and (2) the length of time required for the development of the clinically visible reaction after the union of allergen and sensitized tissue.

This classification serves in the main to attempt a sharp differentiation between a hypersensitivity of the ectodermal, epithelial, epidermal type on the one hand, and the mesodermal, connective tissue or vascular hypersensitiveness on the other. Such a differentiation may prove applicable not only to the study of skin sensitivity, but also to the phenomena of hypersensitivity of the mucous membranes and of the internal organs. For these, too, consist of an epithelial and more highly differentiated component and of a stroma of mesodermal origin. It would seem that certain allergic manifestations can primarily affect either one or the other of these two types of tissues; and that an epithelial hypersensitivity differs in fundamentally important ways from a mesodermal one.

This is the case in the skin, at any rate. Close-knit as epidermis and cutis are, and necessary as it may be to regard these two tissues as coordinating parts of one organ, it is apparent, nevertheless, that certain allergic reactions take place in the epidermis; and that, in these, the cutis participates later and only secondarily; and that, conversely, the blood vessels of the cutis can react first

and primarily, and the epidermis changes which may follow, then be of only accompanying and secondary character.

Group I, Table I

The allergic dermatoses in which the epidermis is the primary shock-tissue are those which are usually called dermatitis eczematosa (eczematous dermatitis), contact dermatitis, dermatitis venenata, occupational eczema, etc. I have gained the impression that these terms have, in general, been used to describe conditions which are intrinsically allied, and that it is impossible and therefore useless to attempt to separate them by hair-splitting definitions. I should prefer to regard them as synonymous, all applicable to this one and the same group.

A glance at the histologic diagram (Table I) will show that the group of epidermal sensitivities is designated as Group I, and that it possesses certain characteristics. In this group, the primary and elementary lesion is the intra-epidermal edema which produces the histologic spongiosis and intra-epidermal vesicle and, when further developed, the clinical blistering and weeping. The reaction of the epidermal tissue is almost always relatively slow, and not of the explosive or immediate type. It usually

*Read before the section of Dermatology, 114th annual meeting of the Michigan State Medical Society, Battle Creek, September 12 and 13, 1934.

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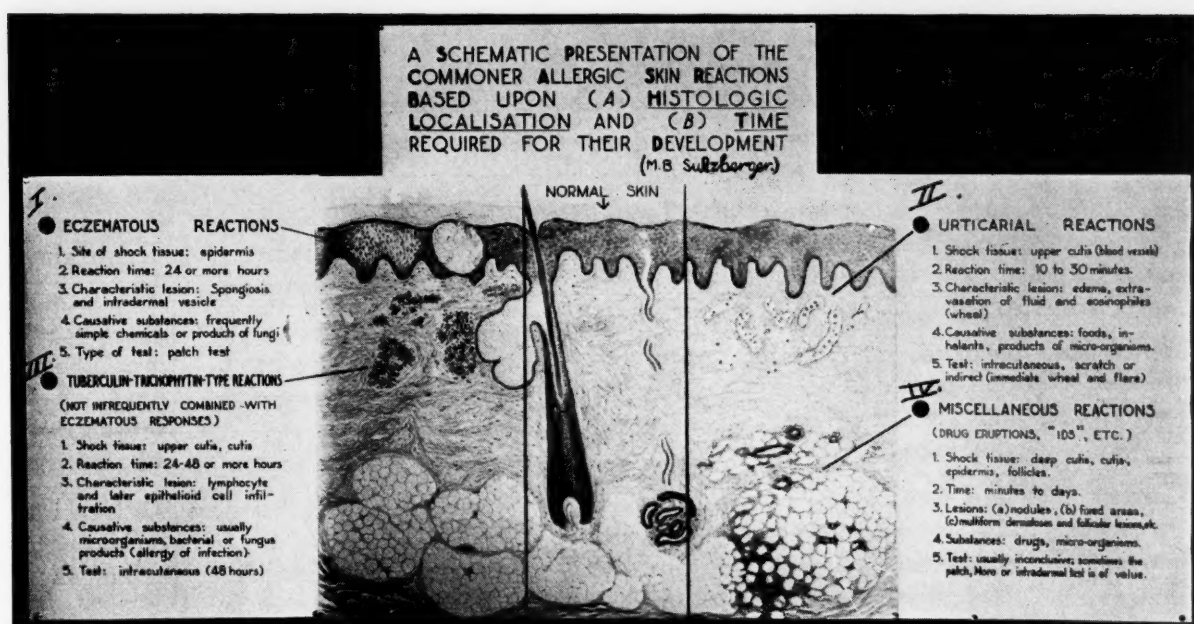


TABLE I

(Reprinted from article now in press, Journal of American Medical Association, "A Tentative Classification of Allergic Dermatoses" by Sulzberger, Wise and Wolf.)

takes 24 to 48 or more hours for the clinical reaction to reach its acme. Although there have been many claims that antibodies (Prausnitz-Küstner antibodies—reagins of Coca) have been demonstrated in this type of hypersensitivity, I can record only negative results in my own very numerous attempts at their demonstration. And I believe that it is the opinion of the majority of investigators that thus far none of our present methods has brought incontrovertible proof of the existence of antibodies in eczematous dermatitis.*

It is another characteristic of this form of epidermal hypersensitivity that the hereditary or familial element is generally absent. (Table II.)

Even this very brief enumeration of characteristics must bring the recognition that epidermal (epithelial) hypersensitivity differs fundamentally from other forms; and that it must occupy a place of its own in the classification of types of allergy.

A further consideration of the site of the shock-tissue, of the length of the reaction time, and of the means which this shock-

tissue has at its disposal to protect itself from possible sensitizing noxae—all lead to inevitable deductions which are in conformity with actual clinical observations and, therefore, of practical value. For instance, it must be the object of the skin tests to bring the allergen into contact, as intimately as possible, with the hypersensitive- or shock-tissue. Since the usual scratch method or method of intracutaneous injection carries the greater part of the allergen *through* the epidermis and immediately into the upper cutis, these methods are obviously not suited for testing epidermal hypersensitivity. (I have been able to convince myself, by means of intracutaneous injections of methylene-blue solutions followed immediately by excision of the injected site, that practically none of the dye is deposited in the epidermis, but that it is injected only into the cutis structures.)

To test for epidermal hypersensitivity, it is therefore necessary to employ a technic which does not over-shoot the mark in this manner, but which brings the suspected substances into intimate and concentrated contact with the epidermal shock-tissue. The suitable method is the patch test of J. Jadasohn and Br. Bloch, which is now too well known to require further description. Since the reaction takes 24 or more hours to reach its maximum, it follows that the tests

*It is quite possible that new methods will successfully demonstrate fixed cellular antibodies in eczematous and epithelial hypersensitivity. A method of extracting cytoplasmic fluid by means of high-pressure presses was recently described by Beatrice and David Seegal and Khorazo, and commented upon in an editorial in the Jour. A. M. A., 103:922, 1934. It would seem that such a method could be applied to the study of eczematous contact dermatitis with prospects of successful demonstration of cellular antibodies.

CLASSIFICATION OF THREE COMMON TYPES OF ALLERGIC SKIN DISEASES AS REGARDS SPECIFIC ETIOLOGIC DIAGNOSIS AND TREATMENT

(ACCORDING TO A.F. COCA AND M.B. SULZBERGER)

	Nature of Excitants	Nature of Skin Test Material	Technic of Test	Reaction Time	Nature of Positive Reaction	Specific Treatment
Atopic dermatoses (familial occurrence)	Water Soluble antigens, food proteins and inhaled substances	Aqueous extract or dried extract	Intracutaneous, scratch, or indirect	5 to 10 min. 20 to 30 min.	Wheal and erythema, reaginic	Avoidance if practicable; if not, de- sensitization may be tried
Contact dermatitis (non-familial)	Thus far non-antigenic substances, often simple chemicals and vegetable oils	Original material, suspected substance or extracted vegetable oil	Surface - contact or patch-test	Usually several hours to several days	Erythematous or vesicular dermatitis. no antibodies	Avoidance if practicable; in the case of vegetable oils desensitization usually successful after 3-4 injections
Fungus dermatitis (eczematous dermatophytids)	Products of hyphomycetes and molds	Filtrate of broth culture	Intracutaneous or patch	Usually several hours to several days	Inflammatory papule and eczematous dermatitis no antibodies	Desensitization is often successful but often tedious

TABLE II

(Reprinted with the kind permission of Dr. A. F. Coca from his article in the Journal of the American Medical Association, 103:1275, (Oct. 27) 1934.)

must be read after a lapse of this period.

It seems to me a logical thought that those potentially sensitizing substances which come into contact with a predisposed shock-tissue in the highest concentration will be those most likely to sensitize that tissue. In the case of the epidermis, therefore, substances in the outer world coming into contact with the skin surface will be the most likely sensitizers.

The living cells of the epidermis are protected from contact with too great concentrations of outside substances by several anatomic and physiological barriers and buffers. The two principal ones are the horny carapace of the stratum corneum and the oily covering of sebum. It is, therefore, not surprising that substances which are able to destroy or pass through these barriers will be the most likely to reach the living cells in sufficient concentration to produce epidermal sensitization, and thus to cause contact dermatitis. Keratolytics and detergents which remove and/or destroy the

fatty and horny covering are, in fact, among the common eczematogenous noxae. Oily substances (the plant oils, for example) can become dissolved in the fatty substance of the skin surface, and are thus more likely to produce contact dermatitis than are the water-soluble "protein" fractions of the plants. I believe that eczematous ringworm is another illustration of this type of epidermal sensitization (compare Table II); for the fungi which produce eczematous dermatophytosis and dermatophytids can multiply only in the horny layer, and their products thus reach first and in highest concentration the living cells of the epidermis. The dyes, such as paraphenylenediamine, scarlet red, etc., have a propensity for fixation to horny substances, and can thus achieve a prolonged and intimate contact with the epidermal cell. Metallic salts in solution possess rapidly moving ions of small dimensions and have thus probably a greater facility for penetrating the protective coverings of the epidermis than is possessed by solutions or colloidal

suspensions of larger particles. The local anesthetics, such as procain and butesin, have an affinity for ectodermal structures, and I believe that I have clinical evidence that they are inclined to adhere most intimately to the epidermal cell (especially when combined with picric acid). All of the substances I have mentioned are, as is well known, frequently causes of contact eczema.

It impresses me that the consideration of the epidermis as shock-tissue may, *per se*, serve as an explanation of many of the clinical characteristics of contact dermatitis. First, it is obvious that such a sensitization is likely to occur (1) on the surfaces exposed to the outer world; and (2) that any anatomic or physiologic inferiority in the protective barriers will predispose to eczematous sensitivity. For instance, persons with excessively dry and easily fissured skin, as well as those with soft, moist and easily macerated skin are candidates for epidermal sensitization. I believe it possible that persons with an *a priori* predisposition for epidermal sensitization and with excessively oily skin may have a tendency for sensitization by oil-soluble allergens. But this still requires experimental proof. In addition to the crude aberrations in the mechanical protective features, which may bring eczematous hypersensitivity in their train, abnormalities of subtler nature may occur. For instance, Burghard¹ of Zürich, in his experiments on individuals who have become sensitized to alkalis, found that the skin of these persons was not capable of neutralizing alkali solutions placed upon its surface, as efficiently as normal skins accomplish this neutralization.

It may be mentioned here that it is sufficiently well known that all occupations and pursuits which, through friction, maceration, or trauma, damage the protective layers of the epidermis, bring in their train the likelihood of a high incidence of contact dermatitis. It seems quite possible that the synergistic action of fungi and other noxae in producing epidermal hypersensitivity may be based upon similar breaking of the protective sheath by the first agent, which thus permits the sufficient penetration of the second sensitizing substance. (There are, of course, other ways in which infection and the action of microorganisms or virus interact or combine with the action of other

allergens in producing sensitization. This is a phenomenon which has long been known and studied in dermatology.†)

Recapitulating, it will be seen that the very recognition of the fact that the epidermis is the shock-tissue in contact dermatitis permits a synthetic, if hypothetical, consideration of many apparently unrelated observations. It satisfies our demand for a logical explanation of the eczematogenous nature of many and diversified substances; of why certain types of skin may be likely to become sensitized to certain oil- or water-soluble substances; of why certain occupations tend to produce eczematous hypersensitivities; and of why one can observe evidences of synergistic action of two or more living and non-vital substances and the frequent occurrence of resultant polyvalent hypersensitivities.

Group II, Table I

In Table I, the vascular, cutis sensitivity of the skin is designated as Group II. This non-epidermal hypersensitivity of the skin has an almost completely different set of characteristics, and must be sharply differentiated from Group I. In Group II, the shock-tissue is not the epidermis, but the superficial blood vessels of the cutis. The reaction here is a question of minutes and not of hours or days, as in Group I; and the characteristic lesion is an extravasation of fluid and certain cells through the walls of the damaged vessel, leading to the clinical appearance of the wheal. In Group II, the spongiosis and vesiculation, *i.e.*, the primary epidermal changes, are missing; and the epidermis changes, when and if they occur, are apparently of secondary nature.

As the sensitizing antibodies are presumably attached to the blood-vessel cells in this type of hypersensitivity, one might expect to find them in the circulating blood as well. And this is, in fact, the case. In many instances of this type of sensitivity, passive transference antibodies can readily be demonstrated in the blood serum of the affected individual (Prausnitz-Küstner experiment—reagents of Coca).³

It is a further characteristic of this form of cutis hypersensitivity that the hereditary or familial element is frequently encoun-

†See editorial on synergistic action. Jour. A. M. A., 103: 757, 1934. The Sanarelli Phenomenon seems a good illustration of such action. Dermatologists can cite many such examples.

tered. This hypersensitivity runs in families in connection with hayfever, bronchial asthma, etc. The familial occurrence in this combination, and the presence of reagins, stamps this form of hypersensitivity as atopic (by definition).

(What I have just said regarding the characteristics of vascular atopic hypersensitivity refers only to the skin's reaction to the application of scratch and intradermal tests and to the wheal responses to these tests.

There is no absolute proof that the majority of cases of clinical *urticaria* are to be classified in this group.

I believe, however, that there is, on the other hand, a great probability that *neurodermatitis disseminatus* (disseminated neurodermite) and many cases of *infantile eczema* are due to this form of atopic and vascular skin hypersensitivity. I have elsewhere set forth my reasons for this belief (see Sulzberger, Spain, Sammis, and Shanon—Ref. 3). If my contention in this regard should prove true, it will be necessary to explain why there is, as a rule, no *manifest* whealing in the clinical picture of disseminated neurodermite and of infantile eczema, and why such marked epidermal changes occur in these dermatoses. I have observed certain manifestations which suggest that histologic, subclinical and non-manifest whealing may take place in disseminated neurodermite. Furthermore, most observers agree that the epidermal changes in these neurodermites[†] are of purely secondary nature, and that the primary lesions take place in the vascular layers of the cutis. These secondary epidermal changes lead to the chronic lichenification which so greatly resembles the lichenification of true chronic eczema. However, since in disseminated neurodermite this chronic epidermal change is not preceded by the characteristic lesions of the eczema, namely, by the spongiosis and intra-epidermal vesicle, I should prefer to consider it not a true, but a *pseudo-eczematization* (eczematoid dermatitis).

It must be emphasized that the thoughts outlined in this parenthesis are founded more upon impressions and theory than upon actual experimental proof, and that it may be necessary for me to change my ideas

on this subject, when and if they are disproven by convincing experiments.)

Just as was the case in Group I, in Group II, as well, the mere consideration of the site of the shock tissue would lead to deductions which are in accord with clinical facts. In this group of hypersensitivities, the walls of the blood-vessels are the sensitive tissues. It is, therefore, logical to suppose that the causative allergens will be those foreign substances which reach the walls of the blood-vessels in the highest concentrations. We may, therefore, expect to find that *hematogenously* distributed substances which have entered the blood stream after absorption through the mucous membranes of the respiratory or gastrointestinal tract will be the usual causes of this type of hypersensitivity. And this holds true. For, in atopic vascular hypersensitivity of the skin, we find that the so-called "protein" antigens, the foreign substances which are inhaled and the food substances which are ingested, are the most frequent offenders. We have as common causes for positive tests in this group of allergic dermatoses, foods, such as eggs, wheat, fish, milk, etc., and inhaled substances, such as feathers, kapok, dust, silk and wool particles, horse dander, pollens, etc.

(Unfortunately, most of these cases of atopic dermatitis are so polyvalent in their hypersensitivity and are hypersensitive to such a long list of environmental and food allergens, that elimination measures cannot be successful. It is not unusual to find such patients hypersensitive, for example, to silk, orris root, house dust, one or two pollens, and five to twenty different foods.³ It is obvious that the complete avoidance of all of these allergens is a goal which is impossible of achievement. It might be accomplished for a short period, by means of heroic measures, such as allergen-free rooms and rigid and careful elimination diets, but cannot be carried out for any length of time in a manner compatible with the normal pursuit of life and occupation. It would seem impossible, at present, to help these extremely polyvalent patients by more than topical, local (x-ray), general, sedative, and psychic measures. The immunologic approach of these polyvalent cases does not promise to be fruitful until we find a method of effective non-specific desensitization, or a means of reducing the susceptibility to sensitizations in general.²)

[†]Only disseminated neurodermite is meant; neurodermitis circumscriptus is a different disease and is not considered in this paper.

The recognition of the fact that, in Group II, the site of the hypersensitivity is the blood vessels, inevitably leads to the conclusion that the patch test is not suited as a method of investigation in this form of allergy.³ In this group, one must strive to bring the test substance *through* the epidermis and into immediate concentrated contact with the superficial blood vessels of the cutis. The usual scratch and intradermal tests accomplish this purpose and are, therefore, the ones to use in testing atopic dermatoses — (disseminated neurodermite, etc.). In most instances, the reaction is "immediate" and must be read after the lapse of fifteen to twenty minutes.

Some General Remarks

Consideration of these remarks and of the two charts shows that the proposed basis for classification indicates, by simple deduction from the facts of site and time of reaction, many characteristics of both theoretic and practical interest in these two groups of allergic skin diseases. Among these characteristics, may be mentioned:

- (a) what type of skin test should be used
- (b) what groups of substances are to be considered
- (c) what personal and family history is to be expected
- (d) whether or not antibodies can be found by present methods
- (e) indication as to the prospects of desensitization
- (f) the probable indication for systemic therapy

What has been said of the polyvalence encountered in patients with Group II type of hypersensitivity, coupled with the practical difficulties of specific desensitization or of avoidance of contact, makes it apparent that knowledge gained from skin testing is of greatly limited value in the practical therapy of such cases. *I should advise turning to skin tests only as a last resort.* However, these tests should not be omitted in cases which have defied all non-immunologic measures of treatment. And sometimes one is fortunate enough to be able to find and to eliminate the causes of such atopic dermatoses; or sometimes even capable of desensitizing the patients specifically, and bringing relief.

In Group I—the "contact" epidermal hypersensitivities—the adequate skin test (here

the patch test) is usually of wider practical significance and of greater aid in prophylaxis and therapy. Nevertheless, I should like to state that even these tests should not be used unless an eczematous contact dermatitis has been shown to persist obstinately, or to recur in spite of the usual topical (x-ray) and rational therapy.

It may seem superfluous to say that skin tests should not be performed until at least an approximate diagnosis has been established. However, I am sure that all dermatologists must agree when I say that, in many cases, an accurate differential diagnosis between such conditions as contact eczema, disseminated neurodermite, chronic lichenified dermatitis from mechanical and other causes, chronic lichenified seborrheic dermatitis, many forms of acute and chronic ringworm and monilia affections, often requires, not only a trained and experienced eye, but also prolonged observation and study by clinical and laboratory methods (including skin tests). And even after all diagnostic measures have been exhausted, all of us have a certain percentage of cases which remains unclear. So that I venture to state that conditions which often present such diagnostic difficulties, even to the most experienced dermatologists, will be regularly mis-diagnosed by the pediatrician, allergist, general practitioner, and by non-dermatologists in general.

But I have seen cases subjected to extensive skin tests, which did not even come into the groups I have mentioned; and I cannot but believe my experience in this respect to be one common to dermatologists. I have repeatedly seen cases of scabies, pityriasis rosea, psoriasis, parapsoriasis, rosacea, dermatitis herpetiformis, drug eruptions, etc., etc., and even of various forms of tuberculosis, of erysipeloid, herpes, impetigo, and other infections persistently and, of course, uselessly skin-tested. So that I believe it to be a mistake to start skin-testing *any dermatologic condition* until the diagnosis has been made by a specialist in dermatology. I trust that my remarks have shown how necessary it is to define more closely into just which group of skin allergies the given case belongs, even after the diagnosis of allergic skin eruption or eczema has been made. Even then, I believe that skin tests should not be commenced until every effort has been made to select, by meticulous and

patient questioning and observation, certain substances which are open to suspicion in the given case. For the number of substances which are possible causes of skin hypersensitivity is far too great to permit a high percentage of favorable results in blind and indiscriminate testing. If your suspicions have not been directed to certain substances as possible causes, the best skin tests will too often prove useless.

Unfortunately, I cannot, at this late hour, enter into details concerning other types of allergic dermatoses—such as the drug eruptions, the allergies of dermatomycosis, tuberculosis, syphilis and other infections, of serum sickness, etc. Some of these are to be placed in Groups III and IV, of Table I.

In closing, it will scarcely be necessary to state that the various possible combinations of two or more types of sensitizations (for

example, epidermal plus vascular hypersensitivity, *i.e.*, Group I plus Group II) may, of course, be found in one and the same individual. Yet such combinations seem to be no more frequent than is to be expected from the laws of mathematical probability.

I hope that what I have sketched may be of some help in the understanding and management of the dermatoses of Groups I and II. These are, today, the two most frequent and, therefore, the two most important classes of skin allergy.

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REPORT OF A CASE OF EXTRAPERITONEAL OVARIAN CYST

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It is well known that the embryological development of the human fetus is often capricious. Organs may be transposed, tissue that belongs to one organ may be found buried within an entirely different organ, and many other unnatural conditions have been observed and reported.

The normal ovaries are found within the pelvis. Many supernumerary ovaries have been observed, and are generally located in close proximity to either normal ovary. Few extraperitoneal ovaries have been observed. One of this type has come under our notice which we wish to report.

Case Report

The patient was forty-five years old, small of stature and abnormally hairy. She complained of pain in the upper left side of her belly, which had progressively enlarged during the past year. The pain was remittent; she noticed that during an attack she was unable to urinate. Her menstruation was regular and normal in amount.

Bi-manual examination revealed no pathological information.

On palpating the abdomen a tumor could be felt which filled up the whole left side extending from the costal margin to the brim of the pelvis.

X-ray of the abdomen revealed the intestines, stomach and spleen displaced to the right downward.

Abdominal section disclosed a large cystic tumor, situated in the kidney region, pushing the parietal peritoneum and the abdominal organs downward and forward.

The omentum was a dirty gray color such as is often seen in abdominal cancer. The pelvic and other abdominal organs were normal. The left kid-

ney could not be located and was apparently incorporated within the tumor. A trocar was inserted into the tumor and a litre and one-half of dark brown fluid escaped. A clinical diagnosis of cystic kidney was made and as much of the mass removed as seemed safe.

The pathologist reported an ovarian cyst with papillary new growth on its inner surface. No kidney tissue could be found within the specimen. The papillomatous portion was atypical, hyperplastic and anaplastic.

Conclusions

During the embryonic stage of development of the left ovary some of its cells no doubt were left in the region of the kidney after the remaining cells had descended normally into the pelvis. Those that were left developed into this large ovarian tumor, at the same time destroying the kidney.

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THE GRIDIRON INCISION IN APPENDICITIS

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It is an easy matter to start a discussion among surgeons about the advantages and disadvantages of the various incisions for removing the appendix. There are two main groups of incision favored: in one group are the Battle, right rectus, and paramedian incisions; in the other group are the Davis and the McBurney incisions, the latter of which is also called the gridiron, muscle-splitting, and intermuscular incision. For many years I have used the gridiron incision, the name which I prefer, with increasing frequency, until now I use the gridiron incision for appendectomy almost entirely, and with the proper indications I consider it the ideal incision not only because a lower mortality for acute appendicitis can be obtained by its use but because it has many other advantages which an analysis of my cases discloses. Many surgeons share my views, but many also do not share them. If we could agree on the indications and contraindications for the use of the gridiron incision we could terminate the discussions.

Those surgeons who object to the gridiron incision do so (1) because it gives insufficient room for work, (2) it cannot be enlarged satisfactorily,¹⁶ they contend, (3) it does not permit exploration, (4) there is too great a possibility of errors, and (5) because, as some believe, incisional and inguinal hernias are more common after the gridiron incision.¹⁷ Some surgeons do not give reasons for their objections.

(1) Deftness answers the first objection and can be acquired quickly by all who have courage to begin using the gridiron incision. In other words, many surgeons who have never used the gridiron are afraid to try it, but if they will try it several times, they will find that it is just as easy to work through the gridiron incision as any other incision, and frequently a great deal easier.

(2) Several excellent methods for enlarging the incision have been described which need be mentioned only. The muscles can be spread sufficiently to permit introduction of the hand into the abdomen. Proof of this is given by Dr. Bevan, who uses muscle-splitting incisions, or modified gridiron incisions, for operations upon the cecum and gall bladder. The incision can be changed readily into a transverse Davis

incision by extending the inner end through the anterior and posterior layers of the rectus fascia and retracting the rectus muscle medially. The readiness with which muscles heal and the lack of objection to cutting muscles in kidney operations rule out objections to enlarging the incision in any way that the surgeon may find necessary, in case an error in diagnosis has been made. But so rarely will enlargement be necessary, twice in 859 cases of my own, that it is better to risk occasional enlargement than to use a three to six-inch incision routinely, and it is not criminal to make a second incision in the few cases where that becomes necessary.

(3) Although the gridiron incision can be used as an exploratory incision, it is not a good exploratory incision and should be used only occasionally for this purpose when the diagnosis lies between perforated gastric ulcer and appendicitis where it is better to err with the incision over the appendix than over the stomach. Exploratory laparotomies should be planned before making an incision.

(4) There should be no objection to the gridiron incision because of errors in diagnosis, if it is used only when the diagnosis is certain, a procedure I have followed with few exceptions.

(5) Regarding incisional hernias after operation, it is hard to understand objections to the gridiron incision which anatomically, and according to my experience of having observed only two incisional hernias in the entire series, is the ideal incision for prevention of incisional hernias. Inguinal hernias are claimed to occur because of damage to the ileo-inguinal and ileo-hypogastric nerves causing relaxation of the muscles. Even if this claim were correct, such damage can be avoided by

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knowledge of the anatomy of the region, and one of the nerves comes into view so readily that I never fear damaging either of them. Out of 951 consecutive operations for appendicitis I have found only four patients who have developed right inguinal hernias since the operation, while ten patients had right inguinal hernias at the time of the operation. I have examined ninety-four of this series of cases recently, and many of the others I have seen off and on since their operations. I would greatly prefer to quote a recent examination of all cases and regret that I cannot. Most of the ninety-four patients whom I have examined recently are cases in which I had used drainage.

I made no record of left sided hernias, but I am conscious of the fact that there were some left inguinal hernias present before operation, and that other patients have developed left inguinal hernias after operations for appendicitis. Whenever I read articles about the development of inguinal hernias following operations for appendicitis, I wonder how thoroughly cases of appendicitis are examined for right and left inguinal hernias before operation, and how many of the hernias which have been considered as having developed after operation were either present or potentially present at the time of the appendectomy. I am guilty of having omitted many times the examination for hernia before operation. Until reliable statistics about the observation of inguinal hernias before operation are reported, objection to the gridiron incision on that ground should not be considered seriously. In fact I have concluded that the only objections of merit are offered by those who wish to explore all abdomens and by those who vacillate on the diagnosis.

Some surgeons dislike the gridiron incision because they believe that other incisions have advantages over the gridiron which make them more desirable. Among the surgeons who favor other incisions is Dr. H. H. Greenwood,⁷ who voices the viewpoint of many other British surgeons by saying, "It is strange that it has not become completely obsolete," but he does admit that it is "eminently suitable only for the removal of a normal appendix." I contend that if it is suitable for removal of a normal appendix, it is suitable for removal of an acutely inflamed appendix. When he

urges very gentle handling of the small bowel, with which all surgeons agree, by saying, "With free exposure . . . handling of the small bowel is reduced to a minimum," and advocates the use of packs to wall off the small bowel from the field of operation, he makes requirements for obtaining low mortalities in appendicitis which scarcely can be avoided with the gridiron incision, for how can any handling of the small bowel compare with no handling at all, a restriction almost demanded by the gridiron incision. Furthermore, it is almost impossible to place a pack gently in a patient who strains while taking the anesthetic, as patients sometimes do. Approval of the gridiron incision must be granted on the point of gentleness to the small bowel if it is not handled at all, and frequently it is not touched when the gridiron incision is used. Witness the statement of Dr. R. J. McNeill,¹³ who said, "In the majority of cases the gridiron incision gives approach to the area of infection without traversing the uninfected peritoneal cavity and hence diminishes the risk of breaking down adhesions." Also Dr. S. F. Cottle,² who said, "The manner in which the coats of the small intestines are handled at the time of the operation for removal of the acute appendix is most important. The less handling the less danger of intestinal obstructions from adhesions. The McBurney incision, though condemned by many because of the limited expanse, has this distinct advantage, as it tends to keep the operation away from the coils of the ileum." These few quotations indicate sufficiently that the advantages which some surgeons claim for other incisions are achieved better with the gridiron incision.

Then there are the economic advantages of the gridiron incision, an advantage which cannot be ignored during a depression, for by being able to get a patient home early the hospital expense can be reduced considerably. To be able to get a patient out of the hospital early is also an advantage when hospital beds are scarce. I challenge the advocates of the right rectus, Battle, and paramedian incisions to compete with the advocates of the gridiron incision in being able to get patients home early. Witness my records:

Three hundred and ninety cases were up in five days and 345 left the hospital in five

Days in Bed	No. of Cases	Days in Hospital	No. of Cases
2	1	1	4
3	16	2	2
4	95	3	17
5	278	4	95
6	137	5	227
7	14	6	135
8	38	7	73
9	22	8	47
10 or more	216	9	33
Died	32	10 to 15	130
Unknown	102	15 to 20	56
		Over 20	100
		Died	32

days. When one considers that 181 out of a total of 951 cases were drained and then realizes that 527 were up in six days and 553 out of the hospital in seven days, he must conclude that the gridiron incision has a distinct advantage over straight incisions with which the patient should be in bed at least seven days and generally ten to fourteen days. Another distinct advantage arises from being able to get the patients up early, a procedure I began as a result of a German rumor while I was an interne, that getting patients out of bed early prevents embolism. There were no cases of embolism in the patients who left their beds early. In fact, the one embolism in the entire series occurred the ninth day in bed in a patient who had appendicitis with abscess.

Another great advantage of the gridiron incision is the lower mortality rates which can be obtained. I have found only two optimists among the advocates of straight incisions, Dr. H. H. Greenwood and Dr. Van Buren Knott^{10,11} of Sioux City, Iowa. Dr. Knott cites 161 cases of appendicitis with abscess with 1.4 per cent mortality and 283 cases of appendicitis with three deaths. Although he boasts about the right rectus incision, he does not attribute the low mortality to the right rectus incision but to the fact that he has always removed the appendix and used large drains. Dr. H. H. Greenwood,⁷ quoted above, reported 206 cases of appendicitis, 18 per cent of which were accompanied by general peritonitis, with no deaths, in which he used a paramedian incision. Dr. H. H. Greenwood's record is unusually remarkable, especially because the paramedian incision above all others compels surgeons to drag the infected area over to the midline and give the infec-

tion a good start on its way towards a generalized peritonitis; perhaps more credit is due to the attributes of the surgeon than to the incision which he used. Most pessimistic statements about mortality rates in appendicitis are those of the surgeons who use the long straight incisions. For this they have good reason, their mortality rates being higher as a rule than the general average of slightly over 4.0 per cent, a fact borne out by the following figures:

Dr. F. C. Warnshuis²⁰ quoted a mortality of twelve plus per cent at the Providence Hospital in Detroit where chiefly the right rectus incision is used. Dr. R. D. McClure¹² of the Henry Ford Hospital has recently informed me that the figures furnished to Dr. Warnshuis by the Henry Ford Hospital were inaccurate. He considered as accurate 6.5 per cent for acute cases and 0.2 per cent for chronic cases. I regret that I was not informed of this error before publication of my article on "Mortality in Appendicitis."³ Both types of incisions are used at the Henry Ford Hospital. Perhaps Deaver's⁵ record of 5 per cent as an average for twenty years might have been better had he used the gridiron incision in all cases. He did not use it in cases of acute perforated appendicitis but used it in other forms of appendicitis.⁴

In contrast with these statements I find that most of the optimistic statements about mortality rates in appendicitis emanate from surgeons who use the gridiron incision in preference to the right rectus and similar incisions. Drs. W. D. Gatch and Donald C. Durman⁶ reported 258 cases with the gridiron incision and a mortality of 7.2 per cent, of which 205 were pus cases and had to be drained. This is lower than the usual average of ten to eleven per cent. Thirty-one cases were done through the right rectus or midline incision, and Drs. W. D. Gatch and Donald C. Durman said, "McBurney cases had far less trouble than the right rectus cases." Dr. Wm. L. Wolfson²¹ had a mortality of one per cent in 100 cases, in which he used the following incisions and the number of times he used them:

The gridiron incision.....	95
The right rectus incision.....	4
The midline incision.....	1

Dr. E. Zeh Hawkes,⁹ who maintains that "the McBurney incision is an ideal one," except that when the diagnosis is uncertain a right rectus incision should be made, re-

ported 383 cases with six deaths, a mortality of 1.5 per cent. Dr. Jose D. Mendonca¹⁴ prefers the gridiron incision. Dr. Edward D. Truesdell¹⁹ said, "It is felt that the McBurney, or intermuscular incision, has contributed a not unimportant part" in his mortality of 3.9 per cent for 259 cases of appendicitis. This is below the general average of slightly over four per cent. Drs. Leslie W. Tasche and Jos. P. Spano¹⁸ used the right rectus incision in 519 cases out of 700, the gridiron incision in fifty-nine, Battle's incision in 111, and the midline incision in nine cases. At present they prefer the gridiron incision, because it reduces hospital time.

Drs. E. P. Quain and R. H. Waldschmidt¹⁵ used the gridiron incision in 1,000 cases, had twenty-seven deaths, and are happy about the results, though they did not wish to be thought to be bragging. Dr. R. N. Harbin⁸ reported 818 cases of appendicitis with a mortality of 4.6 per cent and said, "The gridiron is the incision of choice, and we have regretted less often using this incision than the rectus type." Dr. S. F. Cottle, quoted above, reported 800 cases with one per cent mortality. Dr. Hamilton Bailey¹ said, "It [the gridiron incision] is the best incision for the removal of the acutely inflamed appendix. It is occasionally of value as an avenue of approach in an acute abdominal catastrophe of uncertain origin. If unsuitable, the incision is readily closed." He quoted a 3.8 per cent mortality.

In my series³ there were 859 cases operated upon with the gridiron incision with twenty-four deaths or a percentage of 2.79, which is below my own general average of 3.3 per cent. There were ninety-one cases operated upon with right rectus or midline incisions, and in these cases there were eight deaths or an 8.79 per cent mortality. In one case the type of incision used was not recorded. Furthermore, there were ninety-nine cases which might fit in with Dr. Knott's classification of localized appendix abscess cases. In this group there were two deaths, which makes the mortality for the ninety-nine cases with abscess slightly over two per cent, an exceedingly low mortality. The gridiron incision, ordinarily very easy to close, has a distinct advantage when abscesses are found, because when drainage is used the incision need not be closed at all,

thus favoring free drainage and lessening the dangers of the fascia sloughing.

After weighing the objections to and the advantages and disadvantages of the gridiron incision, I believe that the gridiron incision is indicated in all cases of appendicitis where the diagnosis is certain, and when no other work is to be done, and in cases of doubtful perforated ulcer of the stomach or duodenum when the symptoms suggest the possibility of appendicitis. I believe that the gridiron incision is contra-indicated only when a diagnosis of appendicitis cannot be made, and when other work is to be done.

In conclusion I contend that the objections to the use of the gridiron incision in cases of appendicitis are not well founded, that it has advantages over other incisions in reducing hospitalization time, that the absence of embolism in my series of cases which have been got up early commands attention, that the mortality rates for appendicitis are lower when the gridiron incision has been used, and that it should be used in all cases of acute appendicitis.

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WELFARE MEDICAL SERVICE IN OAKLAND COUNTY*

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In counties with a small population the poor were given, as a rule, medical care by their local physicians as the demand arose. In some of the counties, the physician was paid by the commissioners of the poor according to what they deemed adequate fees. Many times these fees were absurdly low as judged by pay granted others working for the same county. Many times excessive fees were demanded and grudgingly paid or cut to a lower figure. The physician sometimes felt that he must ask for a larger fee, as he knew that it would be reduced by a commission composed entirely of laymen.

This system caused a great deal of argument, bickering, and hard feelings many many times. As a consequence, the medical service was inadequate and many times entirely lacking. It also cast a reflection upon the honesty of the profession at large.

In counties of a larger population the usual method was to employ a physician either full time or part time, as the demand called for. Some counties endeavored to hire these physicians as cheaply as possible with little regard to ability. Others paid adequate, yes even princely salaries, but more regard was paid to political consideration than to medical qualifications. We are all well aware that this system didn't result in satisfaction on the part of the patient or the other physicians practicing in the same locality. In actual experience, we find that these dissatisfied patients refused to consult the county physician and either went without medical care or called upon the private physician who, through sympathy, administered to their wants and furnished his own medicine at a constant loss to himself. This resulted in many instances to near pauperization of certain physicians and their families, in localities where a large number of the population were indigent. Taken by and large, this situation was deplorable and something had to be done to correct it.

We have heard much about the New Deal in recent months and will, no doubt, hear much more in the future. As medical men, we should be ever grateful to the present administration for the attitude taken in regard to our problems. For if it wasn't for this effort to provide more adequate medical care, many physicians would be in desperate

circumstances today, we fear. To the best of our knowledge, this is the first time any administration has ever made any effort to consider this problem in its true light. We should not lose sight of the fact that this entire program was made possible by a sympathetic group of public officials. Federal Rules and Regulation No. 7 has proved a true godsend to our profession and to the unfortunates on Welfare relief rolls. The really surprising thing is that it was never put in effect before. Nor should we forget the sympathetic attitude and understanding of our State and local officials. The Welfare Commission in Oakland County are a group of intelligent individuals and their Administrator for the county has been most sympathetic and coöperative at all times. They wish the Welfare clients to have adequate, necessary medical care provided by a physician of their own choice or, in other words, are endeavoring to encourage normal family-physician relationship wherever possible. After all, the administration and the profession have the same ultimate objective, namely to restore sick Welfare patients to health. It would seem therefore, that where this program has failed, it must have been because of a lack of cordial relationship between these two agencies. In many instances the administration has objected to the size of the fees asked for doing this work. What they often fail to realize, however, is that cheap medical care frequently costs much more in the end than first class care does. In many places administrators report that "only the lower grade of physicians care to participate" and we feel that in these counties the public officials are not willing to pay reasonable fees. In Oakland County every physician and dentist have agreed and are now caring for our people in a highly satisfactory manner. One impor-

*Read before Royal Oak Medical Society, October, 1934.

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tant fact not to be overlooked is the educational effects of this program, as it should go far toward breaking down some of the old obstacles that have obstructed health programs. The community should become educated as to its responsibility for the care of the sick. The old tradition that medical care for the poor is something to expect without cost should be completely broken down.

We are told that many of these plans are experimental in nature and will be discontinued if found unsatisfactory. Therefore, it behooves us as medical men to demonstrate, in no uncertain manner, that we will not abuse this trust placed in us, and confine ourselves to that service which is classed as absolutely necessary to maintain the health of the patient. Unnecessary calls do the patient little good, the physician less good and prove a positive detriment to the reputation of an honorable profession. It seems to us that we should all endeavor to prove conclusively to these officials that as physicians all we want is to render necessary medical care. If we can prove this to be a fact, much of the misunderstanding existent in the past will disappear.

Many of our physicians are in the habit of making more calls than others do in treating the same pathological condition. We have no fault to find with this, but in a program such as this some standardization seems necessary regarding the number of visits needed for certain common conditions. In this, we should be guided by the majority and limit the number of calls of certain physicians to those considered adequate by the majority of the profession. The physician desiring to make more calls than would ordinarily be made by the profession at large, should be willing to accept fees for a similar amount as all the other physicians receive for the same condition. We realize that no one can set a certain number of visits as being all that is necessary in every case of the same illness. We are very much aware that individuals vary a great deal, all of which makes standardization impossible. However, the rule of a limit of ten visits for acute illness and one visit per week on chronic illness, seems to cover a large per cent of our cases so far. Exceptions must always be made when necessary and have been so made wherever it seemed logical. We feel that every physician should be

treated exactly the same as every other physician in this matter and have honestly endeavored so to do. Honest differences of opinion must arise in a program so varied as this, but these differences in opinion can easily be adjusted to the entire satisfaction of all concerned by consultation with the Medical Division. Feel free to come to our office at all times and we will endeavor to allow you the same consideration given to your brother physicians of Oakland County.

Good medical service, at the lowest possible cost to the taxpayer, is the aim of the Medical Division of the Welfare Administration. A reasonable fee schedule is one in which the physician should feel that he is receiving at least one-half of his regular minimum fee for doing this work. The Medical Society realizes that, as members of one of the oldest and most honorable professions, they have a sacred reputation to maintain. They do not or will not allow this reputation to suffer through the misconduct or dishonorable actions of a few of its members. They will effectively discipline their own erring or mistaken members far more efficiently and with greater degree of certainty than any layman could attempt. This is the crux of the entire problem and, where placed in effect, will create better understanding between public officials and organized medicine as a whole. The individual physician resents bitterly any attempt at dictation by a layman as to his ability to diagnose or treat diseased conditions of the human body and justly so. It has always been considered best that the "shoemaker stick to his last."

If the cost of medical care becomes prohibitive in the future, there remains but three courses to pursue:

1. Lower fees for all.
2. More stringent limitation of visits.
3. Return to the old system of contract physician.

From this you can see that, as physicians, we are on trial and our actions will determine to a great extent the permanent policy adopted by public officials.

In the world war, our army was composed of young, sound, healthy men whose ailments were for the most part of a minor nature. They, at least, were able to pass a rigid physical examination before entering the service. Anyone familiar with the routine army sick call will admit that it had

many undesirable features as far as adequate scientific medical care was concerned. Anyone holding such a sick call has frequently heard the many jibes hurled at him by a dissatisfied regiment of soldiers. That these jibes were entirely justified in many instances, we must all agree. The indictment, however, should have been directed at the system employed, rather than at the individual medical officer engaged in administering it, for, as a whole, the medical men were competent physicians and surgeons, judged by any of the known standards of the day.

Under the former system of poor relief as conducted in this county, an attempt was made to administer to the medical needs of Welfare clients in very much the same manner as was employed by the army, namely, holding a daily "sick call" for large groups of people. Many of these patients having to wait in line, sometimes out of doors in inclement weather, to get into the physician's office. No matter how well trained and qualified the physician might be, we must at once realize how utterly impossible it becomes for him to properly diagnose and treat such a large group intelligently or adequately, according to modern standards of treatment.

Again when one realizes that a majority of these patients are old and infirm and living under conditions which tend to break down their physical and mental equilibrium, is it any wonder such a system is in disfavor with the recipients of medical care? That this "mass production" method of caring for the sick was responsible for much discontent and unrest goes without saying. If the responsible heads of government admit a responsibility for the health and well being of Welfare patients, then they should endeavor to furnish medical care of such a nature that it will satisfy these unfortunates and not be prohibitive in cost.

Adequate medical care is just as much a necessity as proper clothing, housing, etc., and it has been proven, beyond question of doubt, that adequate necessary medical care is one of the cheapest commodities purchased today. It is the unnecessary, inadequate medical care which has proven so costly in some localities. This can be substantiated by facts and figures for all those in doubt.

The cost over a period of six months in

our county averaged $1\frac{1}{2}$ c per day per person on the rolls of the Emergency Relief Administration. No one can say that this cost is excessive or prohibitive and it includes everything necessary for the care of sick persons in their home or physician's office. Namely: Physicians, dentists, nurses, drugs, surgical appliances (trusses, abdominal supports, orthopedic shoes and braces, etc.), glasses for those in need of them and false teeth where necessary to maintain proper health.

In our system of democratic government, the individual has always reserved the right of free choice of physician whenever he became ill. To force a strange physician upon such an individual is to court dissatisfaction and disaster in many instances. That this trait was ingrained in the minds of our people was evident from past experiences with salaried medical men, attempting to treat large numbers of people. They resented this type of care and openly voiced their objections wherever they congregated. Under the present system, which may not be the ultimate in perfection, by any means, the patient chooses his own physician or dentist and if not satisfied has but himself to blame. If he feels that he is not getting the proper care or attention, he changes physicians in exactly the same manner as he would were he employed and paying for these services himself. This tends to keep the physician alive to the fact that he should render first class service or run the risk of losing his clients and his reputation as well.

Thus this competitive spirit is kept alive and hence makes for better medical service. This is the spirit which has always existed in our country and accounts largely for the fact that America leads the world in medicine today. It would seem, therefore, that this competitive spirit should never be allowed to die, but be encouraged for the betterment of mankind. As said before, political rather than medical qualifications, sad to relate, have too often guided public officials in the selection of physicians in the past, but even in instances where qualifications were of the highest, the fact remained that the number of patients demanding treatment made it impossible to administer proper medical attention and care.

The spirit with which the medical men of Oakland County have entered into this program of medical care for Welfare

Clients deserves nothing but the highest commendation. They have responded with exactly the same promptness and have rendered exactly the same high type of service as they would give their most wealthy patients. This has been rendered at approximately one-half the fees collected from their regular patients, and speaks well indeed for the generosity and high sense of moral duty which goes into the makeup of American physicians in our day and age. Let public opinion pass judgment upon such a procedure. Do we find any other group of American citizens doing more? Do we find bank receivers or attorneys accepting one-half salary when called upon to render public services?

This is not uttered as a criticism of any of these groups but merely to point out that physicians have always and do now stand ready to do their part in any emergency whatever, and are not motivated by a mercenary consideration. That they should re-

ceive something for their services goes without saying as it is granted that any workman is worthy of his hire.

That this complete coverage of the medical wants of Welfare clients has resulted in entire satisfaction is worthy of consideration and should be reflected in a better citizenry of the future both physically and mentally. The physician feels that he is caring for his own patients and not having them weaned away from his office in time of depression as clinics and public sick calls have a tendency to do. After a lifetime spent in the slow building of a practice it is discouraging, to put it mildly, to see one's entire clientele slip away to a salaried government physician, perhaps never to return.

Thus it would seem that from a patient's standpoint, from a physician's and a social standpoint as well, this modern method of caring for the Welfare client is admirably suited and is a decided improvement over older methods.

IDIOPATHIC MEGACOLON OCCURRING IN A WOMAN OF FORTY-FIVE YEARS OF AGE

E. J. RENNELL, M.D.†
TRAVERSE CITY, MICHIGAN

This case is reported because of its resemblance to Hirschsprung's disease, which is considered to be congenital. The patient had been examined and under observation in the State Hospital for approximately five years before there were any signs or symptoms of the disease, which seems to rule out any possibility of its being congenital.

The patient was admitted to the Traverse City State Hospital on September 23, 1924, at the age of 40. The family and personal history is essentially negative except that in regard to her mental disorder, which is irrelevant. Physical examination at that time revealed a middle aged white female somewhat undernourished. The head was negative, a thyroidectomy scar present on the neck and also a right thoracic-left lumbar scoliosis. The heart and lungs were negative. Blood pressure 110/85. The abdomen was flat and there was a transverse scar just above the symphysis pubis, the result of pelvic operation. There were no masses, areas of tenderness, or any distention.

After a period of observation the diagnosis of psychoneurosis was made and the patient remained in the hospital.

Nothing unusual was noted in her physical condition until August, 1928, when there appeared a bilateral pitting edema of the ankles. Examination of the heart was negative. Urinalysis showed occasional hyaline casts and trace of albumin.

In February, 1929, the patient's abdomen became markedly distended and was found to be tympanitic over its entire surface. A high colonic irrigation was given and a large quantity of thin fecal material was obtained but the distention remained and several months later an exploratory laparotomy was performed. The entire colon was found to be dilated, about six inches in diameter, and there was no evidence of obstruction. Other abdominal or-

gans appeared normal. There was an uneventful convalescence but the abdominal distention persisted. The patient was given frequent cathartics and enemata at irregular intervals, and her only complaint was that of constipation until July 14, 1934, at which time she complained of considerable abdominal discomfort and remained in bed. Temperature was found to be 103.6. Examination showed her abdomen to be enormously distended, more so than usual, tympanitic, and the outline of what was thought to be the ascending colon could be clearly seen extending from the crest of the ilium to the right costal margin. Several enemata were given with good results but the distention and discomfort persisted. On the following day the temperature gradually dropped until it became sub-normal and the patient expired.

An autopsy was performed which showed the following:

General Appearance: Elderly white female. Well nourished. Face cyanotic. Abdomen extremely dis-

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tended and tympanitic. Old incisional scar extending from the umbilicus almost to the symphysis pubis and laterally from that point several inches on each side.

Main Incision: The main incision reveals the colon to be very much distended and bursting forth through the incision. The diaphragm was pushed upwards to about the level of the 6th rib and the thoracic contents were very much compressed.

Right Lung: 290 gms. Normal in appearance. Crepitant throughout. Cut section revealed some congestion.

Left Lung: 200 gms. Similar to the right in all respects.

Heart: 300 gms. Normal in appearance and size. Cut section shows all the valves to be intact and of normal size.

Liver: 1175 gms. Appears to be normal in size and appearance. Cut section reveals considerable congestion.

Spleen: 80 gms. Somewhat smaller than normal. Cut section shows congestion.

Right Kidney: 175 gms. Long and narrow. Pelvis appears to be much dilated. Cut section shows normal kidney architecture.

Left Kidney: 150 gms. Similar to the right in appearance. Pelvis and ureter considerably dilated.

Pelvis filled with urine. Kidney structure quite normal.

Stomach: Hour glass in shape. Moderately distended with gas.

Small Intestine: Moderately distended with gas.

Large Intestine: The entire colon is markedly distended throughout its entire length, but more so in the transverse and descending region, where its diameter is approximately 6 to 7 inches. Its length is also increased to approximately 13 or 14 feet.

The proximal portion of the colon is distended with gas and the descending portion filled with impacted feces. In the transverse and a portion of the descending colon, is an area approximately 5 or 6 ft. in length, which is of a dark greyish brown color and has lost its translucency.

Genital Organs: Uterus and adnexa are atrophic.

Summary

1. Megacolon occurring in a woman forty-five years of age who has been under close medical observation and had previously showed no signs or symptoms of the disease.

2. Death resulted from impaction of feces and resulting gangrene of the colon.

3. Autopsy failed to reveal any obstruction.

AS SEEN ABROAD*

JULIUS POWERS, M.D.
SAGINAW, MICHIGAN

In considering Vienna, one should be a historian. We visited the Belvedere Palace. This starts with an archway and beautifully illuminated fountains. Then going up a series of terraces and paths, one comes to the palace, a beautifully symmetrical structure. It is one of the greatest structures in all of Europe, planned and built as a reward for the services of Prince Eugene of Savoy, the soldier of fortune who worked his way to the office of General of the Austrian army, defeating all comers for fifty years. Back of the palace is an artificial lake which gives a good mirror reproduction of the palace. Prince Eugene started a collection of wild animals which was the nucleus for the present zoo. That was later moved to Schoenbrunn. Most of the palace is now open to the public. The famous paintings and frescoes are a remnant of grandeur seldom equaled in the world. It is interesting to note that the Prince rarely stayed in the palace, but preferred living in a tent.

North of Vienna is the Schloss Cobenzl. This was built at about the end of the 18th century by Count Cobenzl. It is a wide building standing all alone up in the mountains. It now is used as a hotel and cafe. Guests are served on the veranda, giving them an inspiring view of Vienna and the surrounding mountains. On the way up, going through Grinzing, we noticed places with a spray of evergreen hanging out. This was an emblem denoting the sale of Hurrigen,

a new wine, which is a delicious drink with a terrific kick.

About the middle of November the store windows start to show "krampus." This is the red devil who calls at all houses December 6, and proclaims the naughty things that the children have done and gives them a switching. Just at this moment, in walks St. Nicholas and drives the "krampus" away. Many shapes and sizes of "krampus" are on display.

The people of Vienna are very courteous. Almost painfully so. An ordinary purchase brings forth many "thank you's" and phrases often ending by saying, "kiss the hand." The gallant young Viennese often kisses the hand of his lady friend when out in a cafe.

Our pension has an important character, a porter. When we get in after 10 P. M., it is necessary to subsidize the porter 40 groschen

(*Concluded from January JOURNAL.)

to get the door unlocked. To ride in an elevator the cost is 20 groschen.

In calling on or staying with a friend, one must be sure to tip the servants. One should not sit on a lounge in a home without invitation because that is an honor especially reserved for distinguished guests. It is perfectly good form to stand up in an audience and stare around as though looking for some one. Eating lunches and drinking beer during shows, also smoking, are common practices. Walking and hill-climbing are the most common pastimes. Men and women wear heavy cleated boots something like those of Michigan lumberjacks. These prevent slipping on the hills. Beggars are aplenty. I saw one today who stood at least three hours holding a baby, about a year old, wrapped in an old shawl.

People here do not seem to mind the cold as we do in the United States. One of the doctors pointed to a girl on the street car and said, "I'll bet she is from the United States." I asked, "Why?" He answered, "Notice those American stockings. Now watch and she will cross her legs." She did. I have never seen a Viennese woman sit with legs crossed.

The women are rather free here but with 800,000 more women than men, what more could one expect? Franz Joseph was a great admirer of pleasingly plump women, so no one apparently tries to diet. The added weight detracts from their grace and forms thick, stocky legs.

Hospitals are not full. Too much territory has been taken away from Austria even to leave enough to fill hospitals. Cadaver material is very scarce right now.

Schoenbrun was the most popular of all the palaces, probably because of the wonderful Glorianna Fountain and the exceptional lay-out of the gardens with the closely-cropped trees and myriads of flowers. This stands as a monument to the skill of Marie Theresa. In fact, true Austria and Marie Theresa are synonyms. The palace is now a public museum. One portion of the garden has been converted into a zoo.

On a trip through the palace in old Vienna, several outstanding things were seen, among them wonderful old tapestries and brocades, two to four centuries old. Many were from Belgium and France as well as Vienna. The palace, as a whole, is a rambling sort of place. Several sovereigns con-

tributed additions, and when they came to a street they bridged over it. The pictures were not as appealing as those seen in many other places. The crown jewels and the plate is something one can never forget. There are solid gold knives, forks, and spoons of all sizes; solid gold serving dishes of many sizes and a multitude of designs; gold decorated glassware to match, and not just dozens but hundreds of these. Then came the same layouts in solid silver with marvelous designs in both silver and glassware to match. Farther on came the table decorations in gold and silver, and combinations of gold, silver, and china. One clever set was a series of mirrors about a meter square and mounted on intricately carved bands of gold and so arranged that they could be placed end to end making a solid mirror some 10 meters long. On these were placed urn-like pieces very carefully wrought out of gold. Some of these were designed to hold flowers, and others had series of containers to hold fruit and sweets. It is said that Franz Joseph was very proud of his mustache and that all the silver and steel must be polished so he could see the reflection of it. The thought came to me that Emily Post would have to issue a new edition if many of us were to dine where this array was used.

During the day one rarely sees a dog in Vienna. The few we do see are muzzled or on leash, but early in the morning and about 7 or 8 o'clock at night, hundreds of dogs are led out on the streets. It is a startling example of what we sometimes call "habit time." The end-result of these promenades is very evident until street-cleaners come through. It is said by the Viennese to be good luck to inadvertently step in this. From my personal experience, I would say that people here should be very lucky.

Whenever a great pestilence struck Vienna, it seems that the ruling monarch would make a vow to build some monument if the pestilence would subside. Thus we have fountains and monuments, and lastly an entire church, the Motif church. An interesting thing concerning this is that they built an altar that was, in grandeur and intricate workmanship, a marvel, but alas, it was too big for the church so it was necessary to place it in another church which was big enough to accommodate it.

A doctor came from Berlin, where he had

an interesting experience. He was dining in a cafe when in came Herr Hitler and sat down across the room from him. This was not known to him. He had just purchased a light finder or exposure meter for his camera, and while sitting at the table he wanted to demonstrate it to a friend. They happened to focus it on a light over Herr Hitler's table. Immediately two guards came and sat back of him with their hands in their pockets, which were bulging as though with a gun pointing at the doctor. The waiter came up and said to the doctor. "There has been a mistake in identity, but just sit still and do not try to leave until after Herr Hitler leaves." When the doctor arrived at his hotel, he found his entire effects had been searched and were strewn around the floor. There was nothing to do about it, but smile and laugh it off.

In conversing with natives of Vienna, one is struck with their firm belief that everything worthwhile in art, literature, science, and especially medicine, originated in Vienna. Many antique stores are here where the old aristocrats take their family heirlooms to sell for enough money to live on. The longer I am here, the more hopeless and helpless poverty is forced in front of me. Generally the people are well shod, but the clothing one sees on both men and women is of the cheapest materials. Some of the really thinking people will even say that only another war will save Vienna.

On leaving Simmering we took the sleeper, which in many ways surpasses our American sleepers. The berths are crosswise of the car, and one has an apartment to himself or two may occupy an apartment. The exceptionally nice thing is the private wash-bowl in each apartment.

In the morning we ran into a heavy snow-storm, thus giving a picture of the Alps first green and later snow-covered. Later in the morning the sun shone on those white mountain peaks, making a marvelous picture. So we figured the weatherman was unusually kind to us. We arrived in Venice about noon. Everyone has read so much about it that I hesitate to say much. However, one must actually see it to realize what it is. We were taken by gondola to our hotel. In the afternoon we had a guide who showed us the "Bridge of Sighs," "Duke's Palace," and the magnificent St. Mark's Cathedral with the famous mosaic work

where St. Mark is buried. The excellency of the pictures and biblical scenes that have been worked out in this building is almost unbelievable. The marble of one wall reminded one of the Michigan furniture workers and their veneer. The marble was split like the leaves of a book and spread, making symmetrical figures on each side.

The needlework and jewelry and embossed leather were very evident in store windows. Some of the embroidered shawls appeared to the eyes of mere men as being of superb quality and design.

We were especially impressed with the beauty of the women of Venice as compared to men. They all seemed so simple and well-meaning. They say Venice is one of the safest places in the world to live, as far as crime goes.

The next day we left for Naples via Rome. Trains from Rome to Naples are crowded. We arrived in Naples in the evening. Next morning we went to Pompeii. There we saw the excavated ruins we have all heard so much about. The fact that most of the findings in the shape of money, jewelry, et cetera, have been moved down to Naples, detracts from the actual visit to Pompeii.

From Pompeii we went over the mountains to Amalfi. This road is a real engineering feat. To one accustomed to the flat roads of Michigan, the hair-pin turns and sneaking along the edges of precipices was a real experience. A stone wall three feet high is built along the outside of this road. At several turns portions of the wall were broken where a car had skidded and knocked out a few stones. None had gone over. Throughout this drive, we were impressed with the fact that every foot of tillable land was used even though some plots were almost inaccessible. As a blot on the natural scenery, one sees many orange and lemon groves with roofs of limbs and branches built over them to prevent frost and promote a gradual ripening for market. Considering the amount of fruit here, it is very high. On the street one pays much more than we do in California.

Just now the wine presses are busy and all along we met casks, bottles, and kegs of wine. A girl, about twelve years old, came by carrying a two-gallon bottle on her head. She turned and watched us, then went down the road never once offering to touch the

bottle with her hands. High up we met women barefooted carrying large bundles of faggots on their backs. At several places we saw small lime kilns where they were burning the limestone to make lime. Wood was used almost entirely as fuel for this purpose.

After lunching at Hotel Santa Caterina and picking some oranges, we proceeded to Sorrento. The drive skirted the cliffs along the Gulf of Salerno and gave us a constant view of the water. Every few miles we came to old watch-towers erected in the days of pirates to give warning by means of bells of their approach. Sometimes we feel there still should be some watch towers to warn us tourists.

At Sorrento we went to the large factory which makes articles of wood inlays. These, of course, were very fascinating. Then we saw displays of handkerchiefs, all hand made.

The constant necessity of bartering for a reasonable price takes some of the joy and a lot of time out of a vacation. Many merchants eventually cut the price 50 per cent.

We drove back to Naples in the dusk. In the evening I went to a variety show. The dancing was not as graceful nor as well directed as in the United States, but was rather more suggestive. The prices are very high. On leaving, I felt I had been "taken for a ride," especially after paying \$1.00 for a package of cigarettes. On returning to the hotel about 11:30 p. m. we passed two boys, about eight and ten years of age, curled up next to a wall and sound asleep. A native told us this was common. Boys who did not get on well at home just left home and begged their living and slept anywhere they happened to be.

The Naples museum, with its priceless treasures from Pompeii, and other collections, is one of the most interesting I have ever visited. One of the most interesting collections was that of surgical instruments. A trivalve speculum was the most intricate. The famous lewd pictures have been closed to the public for three years, so one misses that misery. An enterprising man has copies for sale just across the street.

On leaving the hotel, one must run the gauntlet of taximen, cab drivers, special tour offers and men representing the underworld. This latter group is a left-over

from the old wide open days when Neapolitan life was quoted the world over. The present government has done much to reduce this sort of thing to a minimum.

One leaves Naples with a new concept of life B.C. One gets the impression that there really has been very little advancement since that time here in Naples.

We left Naples early in the morning for Rome. Here again so much is known about Rome that I can add but little. We did the routine sightseeing. In 1929, the government started new excavations and now has established a guard over a large area which is to be excavated later. No one is supposed to do any digging in this area. The owners may dig to a depth of three feet and may keep, but not sell, any treasure uncovered. Any treasure discovered more than three feet deep belongs to the government.

In order to widen and straighten a road, an old Jewish cemetery had to be moved. There was so much excitement over this that the government finally had to move the whole cemetery.

The present Ghetto is to be moved into new sanitary quarters as soon as they are completed, and the old Ghetto is to be torn down. I cannot help but admire the wonderful things Mussolini has done in improving the city. At present a rule prohibiting the blowing of auto horns is being tried. At least the city is not noisy as Naples is. At a church, just outside the old wall, is a tablet giving notice of the return of this church to the Vatican. The date is given as year A.D. 1933 and after Facista 11.

This morning we saw a company of young fellows doing "setting up exercises." This is to make them physically fit to join the army next year.

The people here seem very well dressed and prosperous. However, I am told that the people in cities are well taken care of, but that small town folks are suffering because there is no exporting of their products. The cost of living here in our money is certainly high. One scarcely dares to buy in stores because things are so high. While the stores kept open all day Sunday before Christmas, there did not seem to be anyone buying much.

There are not nearly as many cafes and restaurants in Rome, nor in Italy, as in the northern countries, and they are occupied mostly by men; very few women.

Seats in churches seem to be unknown here. The people stand throughout mass. No one kneels. Several women are seen with handkerchiefs laid on their heads to conform to the rule that all female heads must be covered while in church. On Christmas eve I went to midnight mass at Santa Maria Maggiore Church. This is the oldest Catholic church in the world and has an altar that rivals that in St. Peter's. The building was packed with as many as it could hold. This particular church has preserved some of the wood said to have come from the manger where Christ lay, and on Christmas the gold case containing the wood is brought out by means of a very impressive ceremonial and deposited on the altar. Following this, the Cardinal conducts mass. The grandeur of the robes and church ornaments was beyond power of word description. Several priests have beards, which appears odd to an American.

Mussolini is already working on grounds and amphitheater, which will be used for Olympic games in 1940. The stadium will hold 180,000 when completed. The whole area will have the type of construction we know as Roman, with a very evident modernistic touch. To give one an idea of the massiveness of the plans, one road is to be lined with statues of each of the sixty-nine kings of Italy, all to be produced by artists of today.

Our first great disappointment came as a result of a new ruling of the Vatican. During the years that the Vatican was under the control of the state, the art galleries were open except on holidays, but this year they are closed for the entire week of Christmas, which prevented our realizing one of the chief objects of our trip to Rome.

The Italian language has many words ending in vowels. This is well illustrated in the English used by some of our guides.

The stop and go lights at street corners are operated by a policeman standing at the curb or on the sidewalk next to the building, where he pushes a button to change the lights. Traffic cops wear white gauntlet gloves, which makes his signals very easy to follow.

Very few here speak English, but many speak French. We have had sunshine every

day while here, so it must be Rome that originated the expression, "Sunny Italy."

To me the biggest blot on the landscape of Rome is the Hall of Justice. This is of modern construction and appears to be a hodge-podge of several types of architecture with a lot of gingerbread thrown in.

From Rome to Pisa the trip is uneventful. The train follows the coastline. At Pisa is the "Leaning Tower," also the statue to Galileo and "Galileo's Lamp."

From Pisa to Genoa the road was lined with marble works of various types, both slabs and sculptures.

We arrived in Genoa late in the afternoon, December 26, and found every store closed because of box day. It seems that every working man, or mail man, expects a present on this day and as it is usually in a box they call it "box day." Because of the day and week we found a big entertainment fair going on. It was an outfit similar to those we find in America, going from county to county. The very noticeable thing was the large number of shooting galleries of various types, showing how military-minded the population is.

The following morning we climbed the gang plank of the Rex and bade goodbye to Italy.

* * *

REASONS WHY WE ARE KNOWN AS AMERICANS

1. Our clothes fit better.
2. Our topcoats are of material strange to Europe.
3. Rubber heels. Tan shoes.
4. Our choice of foods.
5. Language difficulties.
6. Inability to make change rapidly.
7. Hexagonal glasses.
8. Large amount of water we drink.
9. Our courteous treatment of women.
10. The shops we frequent.
11. Our lack of demonstrativeness over what we see.
12. Walking with our topcoats open.
13. We are more liable to fail to wear gloves and go bareheaded.
14. We have a tendency to pull our hats down, shading the eyes, instead of wearing them more on the back of the head.
15. Our short time devoted to meals.
16. Our habit of keeping our hands in our pockets.
17. Intonation is more abrupt and harsh to the ear. Not as smooth and musical, and not as high-pitched as in southern Europe.
18. Our visible annoyance at delays and slowness.
19. Method of knife and fork holding and using knife as a pusher.
20. We require butter.

THE JOURNAL

OF THE

Michigan State Medical Society

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FEBRUARY, 1935

EDITORIAL

MEDICAL ECONOMICS

The medical profession is becoming more concerned with factors that enter into the economic side of medical practice, a fact much in evidence at any meeting which is called to discuss medical economics; the attendance is limited often to "standing room only." Elsewhere in this number of the JOURNAL appear several papers dealing with a number of diversified subjects which are of more than local interest. They are, however, concerned with subjects perhaps of greater concern to the urban rather than to the physician whose practice is in the country.

The Afflicted Adult's Law and the Afflicted Child's Law (two separate and distinct acts) are described with great clearness. Both are of somewhat long duration, antedating the term of office of any present member of the council of the State Medical Society or any officer now active. The laws have been amended to permit hospitalization and treatment in the counties in which patients reside. The Afflicted Child's Law as amended, however, is somewhat tentative in its operation, covering as it does a period of two years, at the expiration of which, July next, it will be subject to reconsideration. Patients coming under both these laws were formerly sent to the University Hospital for medical and surgical treatment. The change was an attempt at civic economy that would

at the same time aid local hospitals. In most instances, however, it has been no aid to local physicians who as staffs of hospitals are expected to give their services without remuneration. Under normal times the burden might have been borne without complaint. These are, however, not normal times so that the charity of physicians has been worked to the breaking point. The hospital has received all the remuneration and the doctor none. There are of course exceptions.

The doctor feels that he is burdened with almost every kind of tax while the hospital pays none. Incidentally he is responsible for his torts and must carry medical defense insurance to protect even medical and surgical service rendered gratis in the hospital. A vacant room or a vacant ward in a hospital adds practically nothing to the general management of the entire hospital. A doctor's vacant office, however, is a different matter. The overhead expense goes on. The doctor has a real grievance when he is compelled to bear personally what should be a community obligation. There ought to be sufficient sense of fairness in the minds of those responsible for county budgets to see that the doctor as well as the hospital is paid for the kind of services mentioned.

Another matter stressed by one of the speakers is the inroads made into the legitimate field of medicine by the practice of medicine by hospitals and by corporations, contrary to law. This does not include all hospitals nor all corporations. As already mentioned, hospitals enjoy certain privileges. It would seem that all that would be necessary would be to draw their attention to the matter to effect an amicable solution. The hospitalization with professional care of such as tonsil patients or obstetric cases at a flat rate is unfair not only to the staffs of the hospitals indulging in the practice but to all practicing physicians, including those not on hospital staffs.

STRANGE BEDFELLOWS

A news item in the daily press on December the twentieth announced that for the first time in history British doctors had become affiliated with the Trade Unions. The Trade Union Congress, according to the item, stated that it had enrolled 3,847 members of the Medical Practitioners' Union, chiefly municipal health officers and 7,788

members of the National Union of county officers including health officers.

The item did not inform us, however, what the reaction of the British Medical Association towards this movement has been. Associations and organizations of doctors as understood in America have stressed the subject of the general improvement of the medical profession, particularly in regard to medical science and clinical practice. The purpose has been solely to advance the interest of the country in the way of better medical care. Little or no thought has been given to the matter of securing for the members shorter hours or better remuneration.

The Trade Union ideal, at least to those who can be classified as neither laborer nor capitalist, has seemed to be limitation of output, together with a shorter working day and increased remuneration. There have been times when workers with real ability and the laggard were accorded the same reward; and at times the attitude of both capital and labor has ignored the just rights of that great third party without whom both would find existence a matter of difficulty.

Not conversant with the British background, it is impossible to speak or to write with any degree of assurance in regard to what this latest move on the part of such a large section of the British Medical profession may mean. Sometimes we find strange bedfellows. The instrument that labor has used to enforce its demands when collective bargaining has failed has been the strike, and that of the capitalist the so-called "lock-out." The medical profession occupies a position in all civilized countries that is unique. They can not strike. The traditional lineage of the profession forbids it. *Noblesse oblige*, and the obligation is to render service where ever required regardless of financial reward.

CREDIT RATING

Professor Converse of the University of Illinois has made an investigation of credit men's reports. His findings have been arranged by the National Association of Finance Companies on a percentage basis. Thirty-four occupations have been included in the study. They are, showing the percentage of good risk, as follows: office clerks, 92; retail grocers, 90; store managers, 89; other retailers, 89; school teachers, 86; railway trainmen, 86; railway shop-

men, 85; retail clerks, 83; dentists, 82; doctors, 80; nurses, 71; farm owners, 71; factory (men) 70; travelling salesmen, 69; gas station men, 63; factory (women) 61; lawyers, 61; auto mechanics, 60; janitors, 60; tenant farmers, 59; brickmasons 59; fire and police, 58; railway trackmen, 58; coal miners, 57; college students, 56; domestic servants, 55; carpenters, 53; hotel help, 48; auto salesmen, 47; common laborers, 46; restaurant help, 45; barbers, 43; truck drivers, 43; painters and decorators, 38.

These average credit ratings are of interest to physicians, yet there are exceptions to every rule, and the barber and truck driver sometimes give an extremely good account of themselves. So far as remuneration for medical services is concerned there are two classes of patient. The better class pay promptly; the other meets all obligations in the proportion to the degree of pressure that is apt to be applied to them. The electric light, gas, telephone bills received first attention and so on down or up. The friendly and intimate professional relation of doctor and patient sometimes redounds to the detriment of the former when the time of financial reckoning comes.

MEDICAL AUTONOMY

The importance of leadership within the profession has been stressed. In the great scheme of medical organization in this country, the county medical society is the society of immediate concern to the medical profession. A little more remote is the state medical society, then the American Medical Association. The state medical society is the federation of all county medical societies, the American Medical Association is the federation of all state medical societies. There is nothing new in this relation; it is an analogous to the county, state and nation nexus in the civic and political system. The medical profession is composed of independent individualistic minds. There is a tendency towards the doctrinaire, in which the physician has his own thought-out solutions for the problems that beset the medical profession. We believe that there should be greater unity and that leadership, or, to borrow a term from statecraft, "sovereign power," so far as the scientific and clinical phases of medicine are concerned, should be exercised by the profession itself. Business or industry or banking does not appoint doc-

tors as such on deliberative boards to take part in their discussions. While the relations of the medical profession with the non-medical groups should be most cordial, medicine should manage its own affairs. We would emphasize the importance of the best medical care possible, but, while doing so, the interest of the medical profession as a group is entitled to thoughtful consideration. Any plan of health insurance or health service should include every general practitioner and every specialist in the county who is willing to participate.

**G. CARL HUBER,
ANATOMIST, 1865-1934**

Few teachers acquire both the esteem and affection which G. Carl Huber enjoyed. Primarily a teacher interested in the personalities and problems of his students, he was in addition a well-rounded scholar and an able administrator. In forty-seven years of teaching, he has given thousands of medical students their introduction to the mysteries of human structure. His students will remember him as a handsome and distinguished figure who patiently devoted himself to helping them. His lectures, though apparently simple and direct, were effectively organized. Through blackboard sketches, reconstructions and sometimes amusing contortions of his hands and a piece of towel, even the most difficult subjects were clarified. Students could not but be conscious of the presence of a master. Professor Huber's teaching was thorough, and few subjects, indeed, were given other than the most careful and detailed descriptions. Attention was directed, not to the amassing of detail, but rather to the acquisition of well-rounded concepts. He continually emphasized the limitations of knowledge which our present research methods entail. Though his personal interest in the subject was broad, he refused to indulge in speculation. He would not attempt to draw functional or metaphysical conclusions from purely anatomical data.

Professor Huber's manner was suave, though there was something in it of a rugged forcefulness which commanded respect and rendered discipline unnecessary. Beyond this, one was aware of a warm sympathy and kindly good humor. Even in the later weeks of a tormenting and debilitating illness, his manner changed little. He con-

tinued his teaching with a courageous cheerfulness long after he was forced to discontinue his other activities. His students affectionately referred to him as "Daddy Huber."

In his research career, Professor Huber attained a preëminent position. Over sixty masterly publications, each in a flowing, easy style, remain as a monument to his industry. Anyone who has had the privilege of studying Dr. Huber's slides can testify to the beauty and surprisingly minute accuracy of the figures with which his papers are illustrated. The first seven years of his research dealt primarily with the degeneration, suturing and transplantation of nerves. These were followed by a period of intensive study (1897-1901) on the histology of the sympathetic nervous system and of motor and sensory nerve terminations. During the first three years of the present century, there were studies on the histology and development of neuroglia, sweat glands and gastric glands. From 1905 to 1911, one of the most important contributions of American anatomy appeared in Dr. Huber's studies on the structure and development of renal tubules. In these, as in other studies, the broad comparative anatomical viewpoint was evident. Huber's attention from this time until the United States entered the war was devoted to a wide variety of investigations. He studied the seminiferous tubules, the nervus terminalis, in addition to continuing his investigation on sensory nerve endings and the sympathetic system. It was during this time that Huber's careful papers on the early development of the rat and the development of the notochord appeared. During the war period, in connection with the Army Medical Department, he turned his attention to tireless studies on nerve repair. More recently, along with Dr. Elizabeth C. Crosby, Huber began a comprehensive series of studies on the comparative anatomy of the central nervous system. At the time of his death, a book, the most extensive survey of the subject in any language, was being prepared for the press.

Dr. Huber was a meticulous technician and his microscopic preparations show a consistently high quality which is seldom equaled. He innovated several staining techniques, and introduced the Born wax plate reconstruction method into this country. By the so-called "water-on-the-knife" method

which he devised, serial microscopic sections as thin as two micra could be produced.

Most students and physicians will remember that Dr. Huber was responsible for the English translation and revision of Bohm, Davidoff and Huber's Histology and for the new edition of Piersol's anatomical textbook.

As an organizer, Professor Huber, since 1903, laid the foundation for anatomical courses at the University of Michigan. His broad viewpoint and his desire to make a knowledge of anatomy available to students resulted in dissection not only for medical and dental students but also for students of nursing, art, zoölogy, speech and physical education. As Dean of the Graduate School since 1928, he proved an efficient administrator. Many of his dreams for extending and improving graduate study were, however, thwarted by the retrenchment into which the university was forced during the depression period.

Though Professor Huber will be known to an increasing circle as one of the finest of modern anatomists, his friends and students will remember him as a remarkable man whose kindly mien has been an inspiration.

IMMUNIZATION OF SCHOOL CHILDREN AGAINST WHOOPING COUGH

J. M. Frawley, Fresno, Calif., has given prophylactic injections of 8 c.c. of active undenatured Hemophilus pertussis antigen to a group of 505 non-immune school children. Injections were followed by practically no local or systemic reaction. Since vaccination, these children have been kept under observation. Forty-nine have been exposed to whooping cough without developing symptoms; sixteen were exposed at home and thirty-three at school. In thirty-one children, whooping cough developed. In twenty-five cases the paroxysmal stage was of less than one week's duration, in five cases of from one to two weeks' duration, and in one case of two weeks' duration or more. As controls, 174 nonvaccinated children from the same homes and classrooms who had whooping cough during this period were classified on the same basis as the vaccinated children. The duration of the paroxysmal stage in these cases was as follows: In nine cases it was less than one week, in forty-nine cases from one to two weeks, and in 116 cases two weeks or more. (*Journal A. M. A.*, Sept. 29, 1934.)

"Scholarly and pious persons, worthy of all respect, favor us with allocutions upon the sadness of the antagonism of science to their mediæval way of thinking, which betray an ignorance of the first principles of scientific investigation, and an incapacity for understanding what a man of science means by veracity, and an unconsciousness of the weight of established scientific truths, which is almost comical."

—THOMAS HENRY HUXLEY.

A MOMENT OF MEDICAL HISTORY

W. T. D.

RADIUM

Radium has become an important adjunct to modern therapy. In the discovery of radioactive substances, in the early physical and chemical studies on radium and in the medical application of the element, the x-ray was an important antecedent.

Roentgen first detected the x-rays from the manner in which platinum barium cyanide fluoresced when placed in the neighborhood of a Crookes tube through which was passed an electric current. Later, he made studies on the photographic effect of the radiation, including the famous photograph of his wife's hand. Though the popular press and the medical world were immediately interested in the photographic and therapeutic effects of Roentgen radiation, scientists did not forget the fluorescent phenomena which the rays elicited.

Henri Becquerel was impressed with the similarity between the fluorescence of platinum barium cyanide caused by the x-rays and the phosphorescence of certain salts following a period of exposure to sunlight. In the first case, the fluorescence was caused by invisible radiation; in the second, by visible radiation. He wondered if it were not also possible for visible light to cause substances to emit an invisible type of phosphorescence. Many years before, A. Niépce de St. Victor, an early investigator in photographic chemistry, had discovered that uranium salts caused fogging of unexposed photographic plates. Becquerel (1896) repeated and extended these experiments. He placed uranium salts, particularly a double sulphate of uranium and potassium, first in the sun and then adjacent to unexposed photographic plates. The plates became darkened. He believed that solar radiation was in some way absorbed by uranium to be slowly emitted as an invisible phosphorescence. He found that the invisible radiation of uranium passed through opaque sheets of aluminum, copper and black paper. Images of coins similar to those produced by x-ray could be obtained. Substances, such as paraffin, aluminum,

quartz, copper and lead, placed over a photographic plate absorbed the radiation in different degree, the heavier substances more than the lighter. The radiation ionized the air and discharged a gold leaf electroscope. Further study showed that the uranium salts did not require a preliminary exposure to sunlight to make them emit radiation. The radiation was apparently an intrinsic property of the salt.

Continuing the investigations of Becquerel, Marie Sklodowska Curie, the thirty year old wife of a young French physicist at the Paris Municipal School of Chemistry, studied the phenomena. Discarding, for the time, the photographic methods of Becquerel in favor of the electroscopic method, she made a thorough survey of hundreds of chemical compounds to see if other substances than uranium showed radiant phenomena. By means of an electrometer, the relative amounts of radiation could be measured quantitatively by ascertaining the degree of ionization of the air. The first publication of 1898 demonstrated that thorium compounds were also potent sources of radiation, a fact which was independently discovered by G. C. Schmidt. It was further observed that pitchblende and chalcocite, natural compounds or ores of uranium, had a greater radiation than all other compounds. Chalcocite, a phosphate of copper and uranium, when prepared in the laboratory, emitted only a small fraction of the radiation of the natural ore. Mme. Curie explained that the radiation of uranium and thorium compounds might be due to the re-emission by these heavy elements of space born rays similar to those of Roentgen.

In a second publication (July, 1898), the two Curies, husband and wife, turned their attention to pitchblende, which had been demonstrated to have two and a half times the radiant activity of uranium. Since the ore was so highly active, they believed that the uranium salts might be accompanied by minute amounts of an adulterant with very great radioactive properties. In attempting to isolate this unknown substance from pitchblende, they treated the ore with chemicals and at each stage of the procedure they smeared the soluble and insoluble fractions of the reactions on the condenser plate of an electrometer to determine in which fraction the strongly radioactive substance might be found. When this substance was determined,

it was discovered to have chemical properties identical with bismuth. By sublimation, the radioactive substance could be separated from bismuth as a pure salt. It was four hundred times as radioactive as uranium. Following a spectroscopic examination by Demarçay, the substance was called polonium, a new element.

A further study of the chemistry of pitchblende in which the Curies obtained some assistance from the chemist, G. Bémont, was published in December, 1898. Barium salts occurring in a residue from pitchblende were found to be accompanied by minute quantities of a highly radioactive substance. Because of the relatively low solubility of the latter, it could be separated from barium by fractional crystallization. Spectroscopic examination proved that it was a new element. It was called radium, because it was many thousand times more active in its radiation than uranium, thorium or polonium. Since it is so highly active, more attention has been given to it than to other radioactive elements.

Studies on the properties of radioactive substances were continued toward the end of the nineteenth century by the Curies and Becquerel among others in France, by Rutherford and Soddy in England and by Geisel in Germany. At this period, it was discovered that the radiation from radium was a complex of three types of ray: atomic nuclei, bearing a positive electric charge, negatively charged electrons and light waves of extremely short wave length. According to the terminology of Rutherford, these came to be known as alpha, beta and gamma rays, respectively.

Further study revealed the mechanism by which radium emitted radiation. Over a period of about seventeen hundred years, one half a given quantity of radium breaks down to a chemically inert gaseous product known as radium emanation, as niton or, more recently, as radon. This gas is the first of a succession of eight stages in the breakdown of radium. In each of these stages, which is relatively short-lived, alpha, beta and gamma rays are emitted and the atomic weight becomes less. Polonium is the last stage having radioactive properties. The radiation of radium then is really the combined radiation of all its decomposition products. A specific quantity of radon adheres to its mother element and while this equilibrium quantity is

maximum the element emits a constant radiation. It is thus through radon that radium exhibits its radioactive properties. When radon is removed, as it may be with special suction pumps, the radioactive properties are to be found in the gas. The activity of radon separated from radium, however, gradually diminishes. Half is dissipated each four days. When radon is removed from radium, the activity of the latter is reduced until the normal equilibrium quantity of radon is restored. Then radium emits its usual radiation. There are thus two sources of radioactivity: radium, the constant source of indefinite duration, and radon, the diminishing source of short duration.

The early workers discovered that radium could not be handled with impunity. By 1900, Walkoff and Geisel noted that a quantity of radiferous barium in a celluloid capsule when placed on the arm for two hours produced a slight reddening and after two or three weeks the inflammation increased and the skin sloughed away. Becquerel, one time, carried a small tube of highly active radiferous barium chloride in his vest pocket where it remained for about six hours. After ten days, the skin below the pocket became inflamed; in twenty-one days, the skin sloughed and there was suppuration. The wound finally healed after forty-nine days, leaving a scar. In order to obtain further data on the physiological effect of radium, Pierre Curie exposed his arm for ten hours to a more feeble salt. In a few days, the skin was burned; a scab appeared on the twenty-fourth day, and on the forty-second the epidermis began to re-form. Mme. Curie observed that her fingers became inflamed and painful after handling radium and that the effect did not disappear for about two months.

Similar skin effects had been noted in 1896 by early investigators of x-rays, and the epilatory effect of radiation on the skin was known. The latter effect led to the use of the x-ray in hypertrichosis and later in the treatment of nevi and lupus in 1897 and 1898. When it was discovered that the radiation of radium produced similar effects and had physical properties like those of the x-ray, attempts were made as early as 1901 to use radium in therapy. At this time, Danlos borrowed radium from the Curies and applied it to the treatment of lupus and

other skin conditions. Oudin, Gadaud and Hallopeau had used it by 1902. In a short time, as radium became available in European countries, neoplasms were treated with radium and attempts were made to use the radiation in surgery and gynecology as well as in dermatology. Robert Abbe introduced radium into the United States.

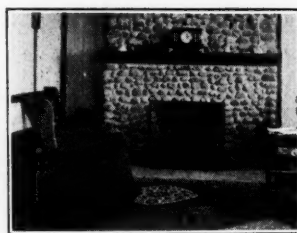
Though radium was used extensively in therapy during the early years of the century, and some of the physiological effects of radium were learned, no studies were of much importance until the systematic, scientific study of Wickham and Degrais. These workers made use of surface applicators in which radium salts were mounted on a plaque and covered with a thin layer of special varnish. Wickham tried to systematize the factors of dosage used in radium therapy. He also adopted the practice of placing inert substances, such as cotton wool, between the radium and tissues in order to modify the radiation reaching the tissues. He originated the principle of crossfire for the treatment of deep-seated growths. In 1906, Wickham and Degrais established in Paris a laboratory for studying the physiological and therapeutic effects of radium. The new director of this laboratory, Henri Dominici, probably did more than anyone else to place radium therapy on a firm scientific basis. When he began his work on radium, the element was falling into disuse, because it so frequently caused necrosis. Dominici demonstrated that the damaging effects were produced by the alpha, the beta and the shorter gamma radiation. By enclosing the radium in heavy metal cases which absorbed all but the stronger gamma rays, he obtained a greater penetration efficiency for the radiation. Radium thus became safer and more effective. Abbe introduced the technic of inserting radium tubes into tumors, and Stevenson and Joly, in 1914, modified the technic by using implants of fine capillary glass tubes containing radium emanation. About this time, radium needles came into use. These consisted of thin closed platinum or steel tubes provided with a needle eye and containing usually five or ten milligrams of radium salt. In more recent years, G. Failla (1926) devised gold seeds containing radon to be permanently implanted in the tissue. After five or six days, the radon decomposed and the containers were merely inert and harmless for-

eign bodies. In practically all modern use of radium and radon, the tubes containing the substance are made of metals which filter out all but the gamma radiation. An early technic of inhaling radon and of injecting radon and radium into the blood stream was of transitory importance.

A recent development of radioactive material has been the successful isolation from radium ores of protactinium, the mother element of actinium. A. Debierne, a colleague of the Curies, discovered actinium in 1899, but, due to the difficulty of isolating it from the rare earth metals with which it was found, it did not receive much attention. Now, however, with the isolation of protactinium, in 1934, by A. V. Grosse, the actinium radioactive series acquires a new importance, since the element is only a little more rare than radium. In addition, its gamma radiation possesses greater energy and its most penetrating rays have a shorter wave length.

In the earlier days of radium therapy, the activity of the radium salt was compared with that of uranium and the strength was indicated as a multiple of the uranium standard. In 1912, Mme. Curie prepared a quantity of highly purified radium which serves as the international standard. The standardization of radium sources and filtration materials diminishes the number of variable factors to be considered in treatment by two. There remain the size and depth of the tumor, the location and type of tissue involved, the distribution of the source, its distance from the tissue and the duration of exposure. These factors do not admit of easy standardization. Though radioactive substances have become an important therapeutic agent, their use still requires a high degree of skill in the selection of cases for treatment and in the supervision of therapy.

The House of Delegates of the American Medical Association meets in special session in Chicago, February 15. In view of the movement on the part of the Federal government for some form of health insurance, the deliberations and conclusions of the House of Delegates are of special importance. Every practising physician in the United States should keep himself thoroughly informed.



The Editor's Easy Chair

REVIEWING AN OLD BOOK

The writer has felt at times that there are old books he would rather review than some of those recently off the press. He has selected an old favorite, the product of the author's off hours, which leads us to speculate on the nature of leisure which many of us find to be our lot. A conclusion which no one will dispute is, that real leisure is a rhythmic alternative of work. Can the unemployed be said to have leisure? We are inclined to think not. All work and no play makes Jack a dull boy, and all play and no work makes Jack stupid. So then, true leisure is only possible as a period alternated with work. Leisure is made up of the interludes of work. No work, no leisure.

* * *

The book selected is "*Horæ Subsecivæ*," Leisure Hours, by Doctor John Brown. The known facts of his life apart from what may be gleaned from his essays and sketches are somewhat meager. He was born in 1810 in Lanark, Scotland, and died in Edinburgh 1882. Educated at the Edinburgh High School and at Edinburgh University, he was graduated in medicine 1833. He was for a time surgical assistant to the great Syme, who seems to have exerted a profound influence on his life, of whom Brown said, "He never wasted a drop of ink or blood." We imagine that from his scholarship, associated with an unique personalty, John Brown was one of the leading physicians of Edinburgh, though like many other doctors he will be known to posterity by his avocation rather than by his professional vocation. In other words, his claim to fame rests upon his Leisure Hours, published in 1858 and 1861. The *Horæ Subsecivæ* consists of collections of essays and sketches on John Locke and Sydenham, and on men of less note, on dogs and places and other subjects. He has been described as one of the "few favored and inspired gossips of literature." In one of his essays he begins by saying, "If man is made to mourn, he also, poor fellow—without doubt therefore—is also made to

laugh." Brown was a master of both pathos and humor. Our author has little use for the medical savant who approaches the sick bed with a countenance that is more suggestive of graves, worms and epitaphs, than hope and comfort.

"My excuse is, that these papers are really what they profess to be, done at bye-hours. *Dulce est desipere*, when in its fit place and time. Moreover, let me tell my young doctor friends, that a cheerful face, and step, and neckcloth, and button-hole and an occasional hearty and kindly joke, a power of executing and setting agoing a good laugh, are stock in our trade and not to be despised. The merry heart does good like a medicine. Your pompous man, and your selfish man, don't laugh much, or care for laughter; it discomposes the fixed grandeur of the one and has little room in the heart for the other, who is literally self-contained."

He goes on to give an instance of a comely young wife apparently dying of an inflammatory condition of the throat. Her friends were standing around her bed hopeless and helpless. Her husband suggested, "Try her wi' a compliment." She had a sense of humor as well as had her husband and she laughed, which caused the abscess to burst and a happy recovery was the result. All this was, of course, nearly a century ago and in the meantime more approved methods of treating quinsy have evolved. Our author goes on to discuss humor:

"Humour, if genuine (and if not, it is not humour), is the very flavour of the spirit, its rich and fragrant *osmazome*—having in its aroma something of everything in the man, his expressed juice; wit is but the laughing flower of the intellect or the turn of speech, and is often what we call a 'gum-flower,' and looks well when dry. Humour is, in a certain sense, involuntary in its origin in one man, and in its effect upon another; it is systemic, and not local."

Brown had no part in the political and religious controversies of his time and, to show how little reason entered into such discussions, he told the story of a clergyman quizzing a raw plowboy, "Who made you?" queried the minister. "God," was the answer. "How do you know?" After scratching his head, the youth replied, "Weel sir, its the clash (common talk) o' the kinty." Brown felt that much of our opinion and belief was simply "the clash o' the kinty."

* * *

Turning from the gay to the grave, he is seen at his best in that touching Scottish idyl "Rab and His Friends." Brief, only fourteen pages, the story made the author famous. The characters, a Scottish surgeon, a

peasant and his wife and a faithful dog, and an operation for cancer of the breast in the pre-anesthetic and pre-antisepsis and pre-asepsis period.

Dr. Brown's lay addresses, with few deletions and inclusions to make them conform to present day medicine, would be excellent for broadcasting by radio. His language is simple, clear and forceful. He prefers the word "spade" to "horticultural implement," five letters to twenty-two. We have the following advice to laymen:

"Therefore I shall ask you (his lay audience) to remember four things about your duty to the Doctor so as to get the most good out of him.

"First. It is your duty to trust the Doctor.

"Second. It is your duty to obey the Doctor.

"Third. It is your duty to speak the truth to the Doctor, the whole truth, and nothing but the truth; and,

"Fourth. It is your duty to reward the Doctor."

He goes on to amplify each injunction; the fourth is especially worth quoting.

"Lastly. It is your duty to reward your Doctor. There are four ways of rewarding your Doctor. The first is by giving him your money; the second is by giving him your gratitude; the third is by your doing his bidding; and the fourth is by speaking well of him, giving him a good name, recommending him to others. You will always get a good doctor willing to attend you for nothing, and this is a great blessing; but let me tell you—I don't think I need tell you—try to pay him be it ever so little. It does you good as well as him; it keeps up your self-respect; it raises you in your own eye, in your neighbour's and, what is best, in your God's eye, because it is doing what is right."

Then he goes on to show that it is a law of our life that there are no onesided duties; they are always double. It is like shaking hands; there must be two. Hence the Doctor's duties to the patient are tersely stated. It is the duty of the doctor in the first place to cure you—if he can; in the second, to be kind to the patient; in the third, to be true to him; in the fourth, to keep his secrets; in the fifth, to warn him, and, best of all, to forewarn him; in the sixth to be grateful to his patient; and lastly, it is the duty of the doctor to keep his time and temper.

* * *

Brown believed that there might be something of survival value in what the cults had to offer. He would exterminate them by appropriating whatever might be of worth by winnowing it from "the false, the useless and the worse." "Why should not the 'The Faculty' have under their control and at their command rubbers and shampooers, and water men, and milk men, and grape men,

and cudgelling men, as they have cuppers and the like, instead of giving them the advantage of crying out 'persecution' and quoting the martyrs of science from Galileo downwards."

"One person," says our author, "I would earnestly warn you against, and that is the QUACK DOCTOR. If the real Doctor is a sort of God of healing, or rather our God's cobbler for the body, the Quack is the devil for the body, or rather the devil's servant against the body. And, like his father, he is a great liar and cheat. He offers you what he cannot give. Whenever you see a medicine that cures everything he sure it cures nothing; and remember, it may kill."

* * *

We do not read Brown, nor any of the older clinicians, for any valuable contribution to medical science as it is today. Many of them, however, were great personalities. It is doubtful if even the best physicians of today have a truer conception of the *art* of medicine, included in that fine personal relation of doctor and patient which we like so much to emphasize. Brown as an essayist is almost in the same class as Joseph Addison or Charles Lamb. His essay on Locke and Sydenham will repay re-reading. The limits of space preclude any review of it, however brief. His keen insight into the character and personalities of others, combined with his incurable optimism, insured a ready welcome in the best society during his lifetime. His *Horæ Subsecivæ* is his monument.

ASSAY OF COMMERCIAL EXTRACTS OF LIVER FOR PARENTERAL USE IN PERNICIOUS ANEMIA: METHOD OF SUCCESSIVE RETICULOCYTE RESPONSES IN THE SAME PATIENT

WILLIAM DAMESHEK and WILLIAM B. CASTLE, Boston, attempted a comparative assay of the different products, using the principle of the "double" reticulocyte response on the same patient. This method necessitates the use of uniform suboptimal doses of liver extract given daily in successive ten to fourteen day periods. Use of this method demonstrates that certain "concentrated" and "refined" solutions of liver extract for parenteral use have suffered a marked loss in the active principle, amounting possibly in certain cases to more than 50 per cent of the potency of the fraction G of Cohn, commonly used as the starting point in these preparations. Until the specifications of the various commercial extracts for parenteral use are clearly defined in terms of what is a just maximal dose, it will be impossible for the practicing physician to obtain an accurate impression regarding the relative potency of the various extracts. The specifications of a liver extract should not be based, as at present, on the amount of active principle with which the manufacturer began to work but on how much remains in the finished product. (*Journal A. M. A.*, Sept. 15, 1934.)

LIGHT SENSITIVE DERMATOSES

Nelson Paul Anderson and Samuel Ayres, Jr., Los Angeles, discuss the problem of light sensitivity in hematorporphyrin, lupus erythematosus, drugs or chemicals possessing the property of sensitizing the skin to sunlight, vitiligo, actinic cheilitis, actinic dermatitis, hydrosa estivale and pellagra. He presents evidence that shows that disturbed sulphur metabolism plays a part in the production of light sensitivity, and further that the exact status of the porphyrin in light sensitivity is as yet undetermined. The high incidence of lupus erythematosus following severe sunburn is recognized and certain cases will respond to dietary measures when all other known remedies have failed. Certain drugs, foods such as buckwheat, focal infections or physical allergy may at times be light sensitizing agents. Whether disturbed sulphur metabolism bears any relationship to vitiligo is yet to be discovered. What part faulty liver metabolism plays in the causation of actinic dermatoses and of pellagra is not known. It appears that liver therapy is of definite value in both conditions. (*Journal A. M. A.*, Oct. 27, 1934.)

B. SUBTILIS

A certain bacillus, who dines upon hay,
Has quite a remarkable humorous way—

With mirth he will frequently fill us;
It's not of the kind that loud laughter provokes,
The boisterous jest, or the practical hoax,
It's not always easy to follow his jokes—
He is such a subtle bacillus.

The first prize for subtlety—so we are told—
Was given at first to that tempter of old,

The tales of whose cunning still thrill us;
But the serpent, most subtle of beasts of the field,
Had he known what the microscope since has revealed,
Would have hastened at once to this rival to yield—
He is such a subtle bacillus.

He's not pathogenic, pathologists say,
His subtlety doesn't affect him that way,
He's no wish to harm or to kill us;
He did once do harm of a very mild sort—
A conjunctivitis the textbooks report—
He must have been pulling their legs just for sport,
He is such a subtle bacillus.

He doesn't do much in the blood-curdling line,
He lets the bacillus cadaveris shine

In deeds which unman us and chill us:
Such methods a cheap popularity buy;
It's not on sensations like that he'll rely;
No, jests such as follow are more what he'll try,
He is such a subtle bacillus.

The candidates in an exam. he'll confuse
By hiding himself in the cultures they use—

They say: "This will certainly pill us
We've never seen anything like it before;
We'll call it an anthrax without any spore!"
So they do—and are pilled for their pains by the score.

He is such a subtle bacillus.

And then he will waggishly go and invade
A virulent culture which someone has made
Of germs that attack us and kill us

And when one makes films, and has stained them
with Gram,
He'll appear on the slide and say: "Guess who I am!"

And the bacteriologist sometimes* says "Damn!
It's that devilish subtle bacillus."

—Round the Fountain.

*Oh, surely never!—Ed.

Medical Economics

The general meeting of the Wayne County Medical Society of December the seventeenth was given over to a discussion of Medical Economic problems. The program consisted of a number of short papers on various phases of the general subject. Most of them were of more than local appeal, that is, the subjects were of interest to the profession of the entire state. Some of the discussions were extemporaneous so that this report of the meeting is confined to the prepared papers and is not intended to be complete.

A PLEA FOR MEDICAL LEADERSHIP

H. A. LUCE, M.D.
Detroit

The majority of the population of the world today is involved in some sort of plan designed for the distribution of health or curative service. The North American Continent remains as yet the largest population area that continues to provide health measures according to traditional methods. That this is inadequate is the contention of many, and powerful forces are at work all over the country to mold public opinion to this conclusion. Public opinion can be guided but not checked. All over our commonwealth, epidemic fires are portending a conflagration. The thought is in the minds of industrialist and labor organizations. The industrialist finds that illness and incapacity interfere with his production and profit. Labor organizations are being taught by socialistic minded groups that socialized medical service will contribute to their security and well-being. Writers of newspaper and magazine articles are treating the subject with increasing frequency. The majority of the articles are not complimentary to the medical profession. Locally we have our department stores, office buildings, newspapers, creameries and industrial plants either with inadequate plans already in operation or in the process of development. The Kelvinator Company's plan is still smouldering. On the first of January, 1935, less than two weeks away, the Olds Manufacturing Company employs in Lansing are starting a program of group insurance with full time salaried doctors in attendance. All over the country the idea is being considered. Right or wrong, a demand is being made for medical service on a different basis from the traditional method. An attitude of opposition on the part of the medical profession towards suggested improvements in medical service from the laity is not contributing to the prestige of organized medicine. If the public is to be convinced that the medical profession is prepared to apply a program of medical service, then medical leadership must be more emphatic than in the past. Today the medical profession is "on the spot." Organized medicine must recognize this situation and proceed at once—not six months from now, but at once—to assume leadership.

At the recent conference on Economic Security in Washington, the stage was all set for an endorsement of a nation-wide health insurance plan. Why there was a delay, nobody knows. Perhaps it was because our President had the unfortunate but first hand knowledge of the importance of the quality of medical service. Quotation from the President's speech at the Economic Conference in Washington, November 14, 1934: "There is also the problem of economic loss due to sickness—a very serious matter for many families with and without incomes, and therefore an unfair burden upon the medical profession. Whether we come to this form of insurance soon or later on, I am confident that we can devise a system which will enhance and not hinder the remarkable progress which has been made and is

being made in the practice of the profession of medicine and surgery in the United States."

Today in the United States, with a population of approximately 120 million, we have 17 million unemployed without adequate means to provide for medical care. Even in the "good times" of 1929, three families out of five were below the "health and decency" level. For the medical profession to assume an "ostrich attitude" is cowardly and asinine. If the medical profession does not assume leadership, some other factor will dominate to the loss of the public and profession jointly.

Attempts to solve our problems by adopting the plans of other nations are basically wrong. Most of the attempts in other countries have arisen out of actual poverty needs; ours is in a measure concerned with the distribution of wealth. There is a wider diversity of conditions and types of employment in our country than in foreign countries. Our standards of living and principles of government are fundamentally different. However, all these things do not preclude consideration of the distribution of medical service. The medical profession must recognize its obligation and act at once.

The problem, for a brief period of time, is still available for organized medicine to solve. The delay at Washington is only temporary.

In the solution of the problem, two factors must be kept in mind: First—quality of service, curative and preventive; second—security for those rendering the service.

The medical profession is accomplishing an excellent work in the solution of the problem of keeping itself qualified to render a high degree of medical service. The Postgraduate Conferences all over the state of Michigan are doing a wonderful piece of work. You are all familiar with the recent Highland Park Annual Clinic at which nearly 500 registered and attended from all parts of the state.

The state of Michigan, as well as many local county societies, is well aware of the importance of the subject. It is to be hoped that the American Medical Association may see fit to call a special meeting of the House of Delegates for necessary action relative to the subject as it affects the whole nation.

The public is not sufficiently educated relative to the quality of service. The laity have an erroneous idea that medical service is comparable to merchandise. There is not one quality of service for the employe and one for the employer. The so-called "low in the social scale" is entitled to the same quality of service that is rendered the "well-to-do." The financially embarrassed person's child may secure an equal degree of warmth and protection from the cold from a \$5.00 shoddy overcoat that his well-to-do neighbor's child enjoys from a fur lined jacket; but, when it comes to illness, there is no such distinction in the quality. Herein lies much of the fallacy of socialized schemes. Medical services cannot be distributed on "chain store" principles. Production lines are conducive to factory outputs, but human beings are not metals nor inert ma-

terials. Localized trials and experimentations are desirable. It is unwise to establish social experiments in such a way that they are difficult to discontinue. The Volstead law experience should be a warning against too hasty actions.

Most health socialization schemes have neglected to consider the economic security of the contributor of the service. The quality of the service depends upon the qualifications of the contributor. The contributor is handicapped without a sense of economic security. Unless this is provided, the coming generation of medical men will be drawn from the less qualified students with consequent deterioration of service.

Local medical societies must assume leadership in the local service problems of their own communities. Improvement in supplying the community with medical care will be made by collaboration of all agencies involved—the health department, the nurse, the social worker, probate courts, economist, business administrators and others.

Good quality of services must be available to all and the contributors to the service must be compensated to a point of economic security.

THE AFFLICTED PERSONS LAWS OF MICHIGAN

L. J. GARIEPY, M.D.†
Detroit

The Afflicted Child Act was created by the Legislature in 1913 as Act 274. The Afflicted Adult Act was placed on the statute books in 1915 as Act No. 267. Both of these laws provided that indigent afflicted persons who needed medical care could receive free service, at the cost to the state, in the University of Michigan Hospital. So all the cases from Wayne County, from all parts of the lower peninsula, and from the upper peninsula were transported, at the taxpayers' expense, to Ann Arbor. This continued for practically twenty years.

In order to get statistics on the number of cases and on the costs, the 1933 Legislature, as an experiment for two years, placed the administration of the Afflicted Child Act under control of the Crippled Child Commission. Also, cases were permitted to be hospitalized in local hospitals, as well as in the U. of M. Hospital. An eleventh hour change in the Act—the "joker" in the law—provided that while the state would pay the local hospital bill, the individual county must pay the doctor bill, if any. This resulted in the joint administration of the Act by the Crippled Children Commission and the local probate judges and auditors, when the case was hospitalized locally.

This experiment applied only to the Afflicted Child Act. The Afflicted Adult Act was not changed in its administration. The probate judges and the auditors of the county wherein the patient resides are still in complete charge of its administration, and must pay the full costs, both of hospital and of the medical man.

Specifically by law and the Attorney General's opinion, reasonable compensation shall be paid to physicians and surgeons. In 1933, the Crippled Children's Commission worked up a schedule of fees for the hospitals, and another schedule for physicians; the latter was arrived at after conferences with members of the Michigan State Medical Society. Today, some county officials are accepting this fair fee schedule, are paying both hospitals and doctors, and the set-up is working satisfactorily; other county officials have obtained a fifty per cent discount from physicians; still others have scotched physicians

down to a seventy-five per cent discount off the special fee schedule. In Wayne County, the officials have not paid one cent to the physicians and surgeons of this county, although the law specifically calls for reasonable compensation.

The Chiefs of Staffs of all the Detroit hospitals held a meeting in January, 1934, and attempted to arrange terms with the County Auditors, but struck a filibuster. During the first year of the law's operation, up to October 1, 1934, approximately 4,200 cases in Wayne County alone were hospitalized under these two Acts, with over 3,115 receiving care in Detroit and Wayne County hospitals, and approximately 1,060 in the U. of M. Hospital. It is estimated that Wayne County hospitals received in the neighborhood of \$251,000 for the care of these cases, and we are glad that local hospitals were so aided. It is unfortunate, however, that the physicians about whom the whole medical and surgical service pivoted, received not a cent, despite the law. The burden of caring for approximately 300 county cases per month—with the load becoming greater every month and year—is too heavy for the medical profession to carry, as it is already weighed down with the care of hundreds of city cases. The breaking point has been reached. The Wayne County Medical Society is receiving complaints from all over the city. It wishes to do something constructive toward the solution of this problem before some damage is done by individuals or unorganized minorities.

DISCUSSION OF PRACTICE OF MEDICINE BY CORPORATIONS

FRANK W. STAFFORD, M.D.
Detroit

The practice of medicine by a corporation is contrary to the law of Michigan. The Michigan statutes specifically state in Sections 6739, 3743, and 6756 of the Public Acts of 1929, as well as in the General Corporation Act, that medicine must be practiced by one who is the lawful possessor of a certificate of registration or license issued under the Medical Practice Act (Act 237 of 1899). The State Board of Registration in Medicine cannot give a license to a corporation to practice medicine. However, the practice of Medicine is being illegally carried on by corporations and although this committee so far has not had time to investigate complaints against dispensaries, insurance companies, and industrial plants, it has made some progress on one phase of this big problem, that is the practice of medicine by hospitals.

In May, 1934, the Wayne County Medical Society sent out a 15-point questionnaire in which the following question was asked: "Have you suffered from flat rate fees (such as for obstetrics) set up by hospitals which are practicing medicine illegally?" The answers were almost unanimous in their agreement that certain Wayne County hospitals were practicing medicine. One hundred and twenty-three (123) specific cases were cited. Sixty-two physicians sent written complaints to the Wayne County Medical Society giving the data and facts of each particular infringement of the law as they had experienced it.

In August, 1934, the present Committee on the Practice of Medicine by Corporation was appointed, and given the task of investigating these complaints. It was a most embarrassing task. It means hard work, over a long period of time. But the Committee was willing to labor, and held weekly meetings. Representatives of all local hospitals against whom complaints had been lodged were or are being called in. In all our contacts, certain facts have been discovered relative to the common use of flat-rate fees by certain institutions. One hospital executive believed that many of the abuses are a matter of usage because—to use the exact statement—

†Dr. Gariepy is chairman of the Policy Committee, Wayne County Medical Society.

"they have never been challenged before." (That's a bad commentary on the indifferent attitude of the physicians connected with that institution.) Some of the institutions individually agreed to stop objectionable practices *if* all institutions would stop. One hospital superintendent stated that personally she would be glad to give up the out-patient department since it was only a source of grief.

All in all, the committee believes that there is much unfair and *illegal* competition with physicians in the practice of medicine. *Now*, there are two courses to follow, working for a solution of this:

1. The Medical Society and the hospitals can work out a mutually acceptable agreement and plan for the handling of these controversial cases, in order to do away with the illegal practice of medicine, and with *charity* abuse;

Or

2. The medical profession can seek to obtain a judicial precedent by resorting to court action.

We believe the former plan to make an agreeable set-up between hospitals and private practitioners which will do away with illegal corporation practice and charity abuse can and will be done—soon. In this matter of working out this problem amicably, other cities have pioneered, and codes have been established which are fairly satisfactory to all concerned.

Physicians and hospitals must work together and support each other, or both will lose to purely commercial interests. Knowledge of each other's problems, plans and purposes will help both.

METROPOLITAN DETROIT HEALTH COUNCIL

WILLIAM J. BURNS†
Detroit

Someone asked the other day, what is the purpose of a council of social agencies? Briefly, but broadly, the purpose as given by one such council is, "to promote the welfare of the community." We are informed, by some who know, that councils of social agencies originated and have been carried on for the specific purpose of widespread *planning* in communities to effect and improve social structure. In the past, the entire work and scope of the activities of these councils has had to do with such matters as recreation, leisure time, character building, family welfare, relief problems, and social rehabilitation. After there had been created over a period of time a multiplicity of various agencies such as the Red Cross, Salvation Army, Associated Charities, Boy and Girl Scouts, Juvenile Protective and Delinquency Agencies, councils of social agencies were created to coordinate the trends and efforts of all these groups into a well organized interlocking set-up for social benefit, with no duplication of work. That was and is a fine piece of work.

Due very largely to the fact that changing social conditions have thrown a tremendous burden on the allied medical professions to provide proper and adequate medical care and health service to all the people, some councils of social agencies have of late stepped over the bounds of their own training and qualifications into a field which represented a gap in the community picture, and have started to delve into things of a medical nature.

Matters of a medical nature involve medical service. Medical service involves the skill and experience possessed only by the medical profession. The interests of the community will be best served if councils of social agencies will concentrate their activities on those efforts of a *social* nature, and, where health problems enter into the picture, depend upon

coöperative and coördinating relationship with health councils guided by people trained in providing medical care. The physician working alone could hope to do only an imperfect job in the field of recreation, leisure time, Salvation Army work, or Volunteers of America work. Conversely, the social worker, without proper coöperation and advice, cannot hope to do anything but an imperfect job in the field of medical care and health prevention.

Because of the *social aspect* of health service, the council of social agencies in any city fits into the health picture as an *aid*. The county medical society must work with it and use its facilities for the good of the people, for the good of the profession, and the individual physician. On the other hand, the allied medical profession cannot stand idly by and allow any council of social agencies to take over and control entirely and exclusively an organization designed to study and lay out the program covering community health and care of the sick.

In Detroit, what would be such an organization? Answer—a Metropolitan Detroit Health Council representative of all interested groups.

This Health Entente is a community need. It should be created at once, under the pioneering sponsorship of the allied medical professions. All *groups* interested in health work and all *individuals* interested in health problems would be joined into one coöperative, friendly council, made up of four sections. The civic leaders section, the public health section, and the hospital and dispensary section could integrate their studies and plans with the professional section to insure best health results. All four sections would work in harmony among *themselves*; then as a *unit*, the Metropolitan Detroit Health Council would work in harmony with existing agencies and institutions, resulting in community good. The professions, the people served, the agencies—all would gain. The American Medical Association states that "A Health Council has a general tendency to favor good community relations, and more communities *with health councils* have good community coöperation than those communities without health councils."

The doctor's work is social as well as medical and economic—necessarily so. So he cannot stand alone, without loss to himself and his profession. The Metropolitan Detroit Health Council should be a member of the Council of Social Agencies of Metropolitan Detroit, to do the greatest good for the profession and for the people. With all groups working together, the recommendations of the two surveys regarding Detroit dispensaries can be carried out, without experiencing the mistakes suffered by other communities.

The creation of a "Metropolitan Detroit Health Council" has been approved by the officers and by the Board of Trustees of the W. C. M. S. President Cassidy recently appointed a committee of three which has contacted the officers of the Council of Social Agencies of Metropolitan Detroit and offered aid in organizing a health council for Detroit. The organization of this important *study* group must be effected at once. Physicians must get mighty interested in the work—if they want to have *something* to say about their own business.

Motion of Dr. C. G. Jennings: I move that the Wayne County Medical Society endorse the immediate organization of a Metropolitan Detroit Health Council for the purpose of securing good health service for all the people at a minimum of expense, and that the officers of the Wayne County Medical Society be empowered to effect this organization in coöperation with community agencies dealing with medical service and health protection.

Seconded by Dr. J. M. Robb. Motion carried unanimously.

†Mr. Burns is Executive Secretary of Wayne County Medical Society.

DEPARTMENT OF SOCIETY ACTIVITY

Edited by The Secretary

MID-WINTER MEETING OF THE COUNCIL

This issue contains the minutes of the Mid-Winter Meeting of the Council, the various reports rendered and a record of the actions taken thereon. All members are urged to read them.

By action of the Council it was voted that the Annual Meeting of the Society be held September 23, 24, 25 at Sault Ste. Marie.

THE CANCER PROBLEM IN MICHIGAN*

While cancer prevention and control is becoming of increasing importance in the medical field it is by no means a new problem. Cancer is one of the oldest known diseases, the earliest writings of India and Persia containing references to it. It was well known to the ancient Greeks and, with the exception of radiology, was treated by them much as it is today, *i.e.*, by surgical excision and burning with the hot iron, of which diathermy and electro-cauterization are the modern successors.

Because of the antiquity of the disease and its ravages throughout the ages cancer becomes a fascinating subject for study. For centuries little or no progress was made in its control because its manifestations were shrouded in mystery, as were most fundamental biological functions at that time. More progress has been made in our understanding of the disease in the last thirty years than in the previous three thousand. It is only as the cold eye of scientific research has been focused on this problem that much of the mystery has been stripped from it. Ignorance begets mystery, and mystery fear; both mystery and fear vanish as knowledge replaces ignorance. Because of this fact the most promising attack on the cancer problem today is through education

of all classes concerned with it. As knowledge of the problem increases, the hopefulness of the situation becomes more apparent. It was not recognized until recently that the educational attack on the problem should concern both the professions and the public.

The only national organization in the field of cancer education is the American Society for the Control of Cancer. It was formed largely as a result of the interest of leading gynecologists who were impressed with the appalling mortality from cancer of the reproductive organs in their patients, and began to function in January, 1914. The Society was formed primarily to carry on public education as to early signs and symptoms and the necessity for attention to these signs wherever found. Education of the professions was left, and still is left, largely to their own members, realizing that the professional problems are peculiar to each group and the methods to be employed will vary with the different groups concerned.

After a period of educational effort the Society found, however, that in many communities the public was being urged to seek a professional service not then available, and the public reaction to this situation was not a healthy one. The inability to obtain the service desired often was due to the absence of adequate diagnostic and treatment facilities. The introduction of radiation therapy came with such suddenness and the financial demands to provide it were so heavy, that few institutions were or could be promptly equipped for this service. Even today, the number of such institutions equipped adequately for diagnostic and therapeutic procedures in keeping with modern knowledge of the disease and methods for its treatment is far too few. One of the healthy signs in the attack on this problem is the increasing interest of hospitals and their staffs to provide for their communities the latest approved methods for diagnosis and treatment.

Due to the educational efforts of the American Society for the Control of Cancer, which always have been of a conserva-

*Now under way are two Surveys of Cancer in Michigan, one by the American Society for the Control of Cancer, the other by the Michigan Department of Health. By agreement between Doctor Rector and Doctor Slemmons these surveys will be coordinated and will not conflict or overlap. By request, this review is presented by Dr. Frank L. Rector of Evanston, Illinois, Field Representative of the American Society for the Control of Cancer.

tive and constructive character, the medical profession is coming to realize the intelligent interest of the public in this problem. Reporting of nearly 25,000 five year cancer cures by the American College of Surgeons has done much to encourage a more optimistic attitude toward this disease in the public mind. Ignorance of the disease by the public and professions alike has done much to perpetuate the false ideas and conceptions so widely held today. Belief of the incurability of cancer is probably the most widely held of these false notions; also the feeling of social stigma attached to the cancer patient, and the fear that it is a contagious disease, has prevented patients from making their condition known. Because of this today probably more than half the cancer patients first seek medical aid when there is no possibility of a cure.

While there is no known common etiology for all types of malignant growth, enough is known about the disease to permit of a marked reduction, from 30 to 50 per cent, in the deaths if all concerned acted wisely on this information. Cancer of the breast, cervix, skin, mouth, and lip give evidence of their presence sufficiently early in the majority of cases to permit of a cure if only the early signs were always understood by patient and physician and competent treatment given. A periodic and thorough physical examination by a competent physician with an "eye for cancer" would reveal many malignant growths in early stages when there is the most hope for a cure, and physicians should perfect themselves in this form of practice in order to meet the demands of their patients for such service.

The public is becoming keenly aware of many of the implications of early signs of malignant growths. In increasing numbers they are asking where capable diagnosticians and competent therapists can be found. Too often they are not thinking of the family physician as the logical person to set them right on these matters. No one is better qualified than he to advise his patients, and he should remember that the fate of the cancer patient rests very largely with the first physician seeing the case. If the physician makes a false step at this time the patient may pay with his life, while his welfare will be safeguarded if the first step is in the direction of prompt and adequate diagnosis and competent therapy. There is

no place in medical service to the cancer patient for a "watchful waiting" attitude by the physician. Every cancer case is an emergency, not for hurried surgery, but for therapy predicated on diagnostic findings.

Already the public has made its influence felt in the cancer field. Eleven states now make cancer a reportable disease to the State Department of Health, and two states, Massachusetts and New York, have Divisions of Cancer Control in their health departments with complete clinical facilities and extensive research programs. Influential lay groups, as women's clubs, are taking an organized interest in the problem and are beginning to ask advice of the medical profession as to appropriate legislation to further improve facilities for cancer prevention and control.

These and other lay undertakings indicate the necessity for increased consideration of this problem by the medical and allied professions. The medical profession should become informed of the extent of the problem, the distribution, also the lack, of facilities for adequate diagnosis and competent therapy, and related matters in each community. In general this information is lacking in all but a few states. It is only during the past four years that intensive statewide surveys of the above problems have been made. It has been the writer's privilege to have made such surveys in six middle western states, viz: Iowa, Kansas, Minnesota, Missouri, Nebraska and Wisconsin. These surveys have been undertaken only on invitation of the state medical organization in the states concerned and have been carried on with their full coöperation. The survey now under way in Michigan, editorial reference to which was made in the January, 1935, issue of this JOURNAL, is following the same plan, and on its completion a confidential report with recommendations will be made to the Michigan State Medical Society for an improved service to cancer patients in the state as a whole.

It is the policy of the American Society for the Control of Cancer to work with and through the medical and allied professions and their organizations in the development of educational programs in the cancer field. It recognizes fully that cancer is primarily the responsibility of the physicians of this country and believes that its best contributions to the control of the disease can be

made in coöperation with the medical profession, lending assistance wherever possible to strengthen the professional approach to the problem. It stands ready as far as its resources permit to assist in the development of a constructive program of cancer control in any community in keeping with that community's needs.

Surveys already made have shown the futility of trying to develop one standard program of cancer control to fit all regions. It cannot be done successfully because requirements on the one hand, and facilities for proper attention to cancer patients on the other hand, vary widely in different communities. This fact emphasizes the importance of such studies as the present Michigan survey to determine the needs and resources of different communities within the state. Once determined, a practical program can be developed to utilize all community agencies that can contribute to a solution of the problem.

Progress in the control of cancer rests primarily with the medical profession. If it takes its rightful place in the education of the public, advises patients of the implications of early signs and symptoms, renders competent service in periodic physical examinations, and utilizes the best methods in diagnosis and treatment of cancer and suspected cancer, a marked improvement may be looked for in this situation. If it continues to treat the matter indifferently it will postpone by so much the benefits to which the community is entitled and may find itself faced with a control program not of its own making. The number and extent of surveys already made by the Michigan State Medical Society in the medical and sociologic fields is an indication that it will promptly assume control of the cancer problem in this state once the factors involved are placed before it in a practical program based upon facts obtained in the present survey.

At the Mid-Winter Meeting of the Council the dues were established at \$8.50, the same as last year. Dues are now payable and we urge each member to send his remittance promptly to his County Secretary.

COUNTY SOCIETIES

HOUGHTON COUNTY

At the regular monthly meeting of the Houghton County Medical Society held January the eighth the following officers were elected for the year: President, Dr. G. C. Stewart, Hancock, Michigan; Vice-President, Dr. T. P. Wickliffe, Calumet, Michigan; Secretary-Treasurer, Dr. W. T. S. Gregg, Calumet, Michigan; Board of Censors, Dr. Simon Levin, Houghton, Michigan; Delegate to State Convention, Dr. P. D. Bourland, Calumet; Alternate Delegates, Dr. A. D. Aldrich, Houghton, Michigan. Our next meeting we expect to have Dr. C. C. Slemons, Head of Board of Health of the State Department, who will address us on "Activity of State Board of Health."

THE CANCER PROBLEM TODAY

The cancer problem, as William Carpenter MacCarty, Rochester, Minn., sees it, has five distinct parts, which he enumerates in their probable order of practical importance: 1. The recognition or diagnosis of this disease or complex of diseases by laymen, general physicians, general pathologists, surgical pathologists, surgeons and teachers of medicine. Each has its own limitations. 2. The statistical frequency of the disease and its relation to human welfare and possibly to that of other forms of life. 3. The application of empirical methods of treatment, there being, as yet, no known infallible specific method. 4. The education of active members of the medical profession, medical students and all those who are or might be affected by this disease. 5. Endowment and execution of pure scientific experimental research which has for its function the study of the biologic nature of the disease. Despite the things researchers have not done, their experiments should be continued, increased and even more abundantly endowed; they will undoubtedly discover the true biologic nature of this disease, which is now one of the greatest destroyers of mankind. Cancer is a biologic disease and its living phases, including its initial phase, must be brought to medical students and practicing physicians. Cancer is, in the author's opinion, a simple problem, although the various specific causes may never be known and no specific cure ever found. It is a problem of health in general, external and internal cleanliness and heredity. It is, so far as the profession is concerned, a problem of prevention, which means early recognition and treatment of things which frequently end in cancer. It is a disease that is the result of disease. Now that philanthropists have endowed medical schools, hospitals and research institutions, it is time for some one to endow a system of teaching for general practitioners. This most important member of the profession is the one who sees but does not recognize small cancers. He must have the knowledge brought to him directly by clinics held in his immediate vicinity. Some well trained individual or some group must be endowed to travel and teach without expectation of financial compensation from practice. Should such an endowment arise, the author suggests that it be a memorial to the late Dr. William Henry Welch, who, in his opinion, has done more for human welfare and happiness than any one else in recent civilization. He suggests further that it be applied in the ethical spirit of the American Medical Association, which represents the whole medical profession in its relation to all the people. (*Journal A. M. A.*, Sept. 29, 1934.)

Minutes of the Mid-Winter Meeting of the Council of the Michigan State Medical Society

Pursuant to the official call, the Council of the Michigan State Medical Society convened in the Statler Hotel in Detroit on January 17, 1935, at 10:30 a. m., with the Chairman, Julius H. Powers, presiding.

The following Councilors were present—Carstens, Corbus, McIntyre, Boys, Cook, Heavenrich, Powers, MacMullen, Urmston, Van Leuven, Cummings, Baker, Brunk, Manthei, Perry and Speaker Luce—16.

Absent—Treynor and Hafford.

There were also present, President Smith, President-elect Penberthy, Treasurer Hyland, Editor Dempster and Secretary of the Medico-Legal Committee Stapleton.

The minutes of the last meeting of the Council and the minutes of the meetings of the Executive Committee, as published in the JOURNAL, were adopted and made a part of the official records of the Council.

The Secretary submitted the following as his annual report. The sections were referred to the Committee on Finances, Committee on County Societies and the Committee on Publication as indicated.

SECRETARY'S ANNUAL REPORT 1934

To the Council.

Gentlemen:

There is herewith transmitted your Secretary's report for the fiscal year 1934. Appended thereto is the Auditor's report, together with a full itemization of all receipts and expenditures.

COMMENTS

The income from membership dues, current and past, was \$20,018.85. The membership as of December 24 was 3,393.

An appreciable number of new members, chiefly from Wayne County, came into the Society in the last quarter of the year. Under the provisions of the new By-Law, such newly elected members may enter the Society on payment of dues for the unexpired quarter. This accounts for the apparent discrepancy in the amount received as compared with the total membership.

Nineteen thirty-three showed a decrease of the income received from dues in 1932 of a little over \$5,000. Much of this has been made up in 1934. There is still outstanding a considerable number of unpaid notes given by members for dues in 1932 and 1933. It is hoped that the members will show an appreciation of this obligation, and, as conditions continue to improve, will make the proper effort to make payment.

One dollar and a half from the dues of each member is allocated and set up on our books as a

subscription to the JOURNAL. On this basis the JOURNAL shows a profit of \$1,439.67. From the profit thus shown should be deducted that percentage of stenographic expense and the Secretary's services which are devoted to the management of the JOURNAL. This should properly be charged against JOURNAL expense. The advertising sales were more than last year and the prospects for 1935 are most encouraging.

To the Council:

The JOURNAL is published as a non-profit activity of this Society and aside from this and, as a matter of society policy, all earnings should be put back in the JOURNAL. It should be and is the ambition of your secretary to run the business part of the JOURNAL so successfully that additional pages may be added. A bigger and better JOURNAL will result, for your Editor stands ready to fill each page with splendid scientific articles, interesting news, and a discussion of current problems, with every page worth reading.

Under the existing conditions, your Society has had an extremely satisfactory year. We have paid off the \$2,500.00 note which the difficulties of 1933 necessitated. For our post-graduate and educational program we have expended approximately two thousand dollars. An accumulation of obligations from 1933, together with heavy current expenses, caused us to exceed our budget for the Medical Legal Defense Committee by some fifteen hundred dollars. The accumulated reserve is ample to take care of this. We end the year in the black, our securities have advanced somewhat in value and altogether, measured by last year, it is most satisfactory and far better than we anticipated.

TENTATIVE BUDGET FOR 1935

The following Tentative Budget for 1935 is submitted for your guidance.

INCOME

3,300 Members @ \$8.50.....	\$28,050.00
Interest	1,200.00
	<u>\$29,250.00</u>

APPROPRIATIONS

Defense Fund (3,300) @ \$1.50....	\$ 4,950.00
Journal Subscriptions (3,300) @ \$1.50	4,950.00
Rent	1,000.00
Annual Meeting.....	750.00
Post Graduate Activities.....	800.00
Committee Expense:	
Cancer	\$200.00
Preventive Medicine....	400.00
Special Committees.....	250.00
Economics Committee..	500.00
Joint Committee.....	500.00
	<u>1,850.00</u>
Legislative Committee.....	2,000.00
Council Expense.....	1,800.00
Postage	400.00
Ptg., Stationery and Supplies....	400.00
Delegates to A. M. A.....	600.00
Stenographic	2,000.00
Society Expense.....	2,500.00
Miscellaneous General Expense..	1,250.00
Secretary's Salary.....	4,000.00
	<u>\$29,250.00</u>

JOURNAL BUDGET

Income	
Advertising (Net).....	\$ 6,000.00
Subscriptions	4,950.00
Reprint Profit.....	150.00
Individual Subscriptions and Sales	150.00
	<hr/> \$11,250.00
Expenses	
Printing	\$ 7,800.00
Editor's Expenses.....	500.00
Editor's Salary	2,250.00
Postage	200.00
Reserve	500.00
	<hr/> \$11,250.00

MEMBERSHIP TABULATION

County	1933	1934	Loss	Gain	Un-paid	Deaths
Alpena	16	15	1	---	1	---
Antrim-Charlevoix-Emmett-Cheboygan.....	34	27	7	---	4	---
Barry	14	15	---	1	---	---
Bay-Arenac-Iosco	61	64	---	3	1	6
Berrien	42	45	---	3	3	2
Branch	11	16	---	5	---	---
Calhoun	109	109	---	---	3	2
Cass	12	11	1	---	2	---
Chippewa-Mackinac	17	16	1	---	1	---
Clinton	11	11	---	---	---	1
Delta	20	23	---	3	2	1
Dickinson-Iron	18	19	---	1	1	---
Eaton	26	26	---	---	---	2
Genesee	137	142	---	5	9	2
Gogebic	24	24	---	---	---	1
Grand Traverse-Leelanau	27	25	2	---	4	---
Gratiot-Isabella-Clare	32	33	---	1	1	2
Hillsdale	20	21	---	1	---	---
Houghton-Baraga-Keweenaw	38	38	---	---	---	2
Huron	9	13	---	4	---	---
Ingham	98	113	---	15	---	1
Ionia-Montcalm	33	36	---	3	---	---
Jackson	65	73	---	8	7	2
Kalamazoo	132	128	4	---	1	7
Kent	209	216	---	7	13	4
Lapeer	17	14	3	---	1	---
Lenawee	30	34	---	4	1	---
Livingston	19	16	3	---	1	1
Luce	9	9	---	---	---	---
Macomb	34	36	---	2	4	1
Manistee	15	15	---	---	---	---
Marquette-Alger	35	33	2	---	2	---
Mason	9	10	---	1	---	---
Mecosta	19	19	---	---	---	---
Menominee	11	10	1	---	---	---
Midland	9	10	---	1	1	---
Monroe	32	32	---	---	---	2
Muskegon	67	66	1	---	---	1
Newaygo	11	10	1	---	---	---
Oceana	11	11	---	---	---	---
Oakland	101	98	3	---	4	2
Otsego-Montmorency-Crawford-Oscoda.....	15	13	2	---	1	---
Roscommon-Ogemaw	6	5	1	---	1	---
Ontonagon	32	32	---	---	1	---
Ottawa	78	93	---	15	---	4
Saginaw	10	13	---	3	---	1
Sanilac	5	5	---	---	---	---
Schoolcraft	25	29	---	4	---	---
Shiawassee	38	44	---	6	---	1
St. Clair	18	17	1	---	4	1
St. Joseph	29	30	---	1	---	1
Tuscola	135	139	---	4	6	1
Washtenaw	---	---	---	---	---	---
Wexford-Kalkaska-Missaukee-Osceola.....	20	20	---	---	---	1
Wayne	1105	1271	---	166	95	26
	3160	3393	34	267	175	76
		3160		34		
GAIN FOR 1934.....		233		233		

MEMBERSHIP

To so materially increase our membership is most gratifying. It indicates real effort and diligence on the part of county society officials, but more than this, it indicates an appreciation of what the society is trying to do for its members, and an appreciation by the profession of the value to them of organized medicine. If the pattern of medical practice

is to be changed, as seems not unlikely, it will be the strong, efficiently run medical society, state and county, which will be the strongest bulwark against impractical, socialistic programs alike detrimental to doctor and patient. The county society is not only a forum for healthful discussion, but makes for the solidarity of the profession, which is so extremely necessary at this time.

In the December issue of the JOURNAL we have listed the deaths during the past year up to the time of going to press. We make the following additions, which makes a total of seventy-six for the year.

Wayne County—Frank Elmer Cameron, Henry Creasey, E. F. Partello, Charles D. Toole and Peter R. Powell.

Huron-Sanilac—W. T. Campbell.

ANNUAL MEETING

The Council has long felt that the designation of the place for the Annual Meeting should be in its hands. At the last meeting of the House of Delegates the responsibility was placed upon this body. This obligation necessitates great care in the choosing of a proper place.

The membership demands not only that the program shall be scientifically worthwhile but it desires comfortable hotel accommodations, convenient to the Section Meetings. When we can furnish adequate and convenient space for exhibitors, the expense of the Annual Meeting is largely covered by the financial returns. From a financial standpoint then it is important that adequate arrangements be made for our exhibitors. A complaint which seems to be common to many state societies is that the Scientific Exhibits are crowded into an inadequate space. More and more the Scientific Exhibits occupy a definite and important place in our Annual Meeting. These exhibits should be fostered and promoted in every way and a convenient and adequate space must be allotted to them.

POST GRADUATE OPPORTUNITIES

It is now more than a decade since the Society assumed with great earnestness, the obligation to offer to its members opportunities for post graduate instruction.

Beginning on a small scale the first program provided for the sending out of special speakers to County Societies on their request. The work progressed through various stages and a high spot was reached when, using a field secretary, we put on one and two day programs in each of our councilor districts. Since the establishment of the Department of Post Graduate Medicine of the University, with the fortunate appointment of one of our own councilors as director, the development of this activity has greatly broadened in scope and proceeded in cordial cooperation.

These district post graduate conferences have been gradually discontinued, in part because of lack of funds, but also because we recognized that, valuable as they were, they were but one phase in the development of the more complete academically arranged program towards which we have been proceeding. As the program developed, two and three week intensive courses have been put on in Detroit, and the specialized courses offered by the University have been markedly increased.

This year has seen the inauguration of a new development in this joint post graduate work. This program provides for centralized clinics to which the doctor may conveniently go one day each week for a period of three months. The carefully chosen program aims to cover considerable ground, for these are essentially general practitioners' courses. The clinical side is emphasized and the demonstra-

tions and lectures are given by experienced, well trained men who are from the faculty of the University Medical School, or are, by appointment, extramural members of the faculty of the Post Graduate Department. A tabulation of the attendance is made with the expectation that some form of credit will be given. The courses in the centers first designated, Flint, Grand Rapids and Battle Creek-Kalamazoo, have vied with each other in popularity, and have met with equal enthusiasm from those attending. Most enthusiastic comments are continually coming in to the secretary's office. The secretary agrees with his correspondents that this activity ranks well towards the top among all Society work, for we recognize that adequate medical care can only come from adequately prepared and trained medical men who, through the years, keep abreast of the advances in medicine.

The attendance at the last program exceeded our expectations. There was a total registration of 796, with an average weekly attendance of about 400. A questionnaire was sent out by the Director of the Department of Postgraduate Medicine to all registrants, with a request for comments and suggestions. About 300 replies have been received to date, all enthusiastic about the course and containing many suggestions that will be helpful in future programs. The development of more centers, particularly in the northern sections of the State, was urged and the Councillors from the Ninth, Tenth and Eleventh Districts indicate that these would be welcomed. At the last meeting of the Committee on Postgraduate Education, a tentative decision was arrived at to establish three, and possibly four, more centers this year. The details of this, together with the entire program, are expected to be ready for the March number of the Journal.

COUNTY SECRETARIES CONFERENCE

The recommendation is made that your Secretary be authorized to arrange for the annual Conference of County Secretaries at a time during the early spring months, to be approved by the Executive Committee. That actual travel expenses, and, when necessary, hotel expenses be authorized.

These conferences are of distinct value and material aid in maintaining county society activities.

COMMITTEES

As we extend our activities into many different though allied fields of endeavor, it becomes increasingly necessary to delegate to Committees certain problems for study, certain activities and certain powers—all subject, of course, to the general policy of the Society as determined by the House of Delegates or the Council. To these hard working Committees must be given the credit for much of the real constructive work which has given Michigan the reputation of being one of the most forward looking State Societies.

The House of Delegates at its 1933 meeting designated five standing Committees—Legislative, Joint Committee on Public Health Education, Cancer, Preventive Medicine and Economics. Each committee is most important in its own field. Special importance this year attaches to the Legislative Committee which shares its usual importance in this legislative year with the Economics Committee. Upon each of these two committees rests much responsibility. The profession expects them to guard well the rights and privileges of the profession, yet will resent activities which are not in conformity with majority opinion or instructions of the House of Delegates. They have a difficult and important job, made easier somewhat by the great confidence the profession has in the personnel of these Committees.

In any year but this the important Preventive Medicine Committee and the Cancer Committee would take an equally important place. The American Society for the Control of Cancer is, with the assistance of the State Society, just beginning its survey of the state. The year offers an exceptional opportunity for intensive educational work and the Cancer Committee is wide awake to its obligations.

I realize that members of other Committees may feel that their committee work is of equal importance though in a more limited field. Indeed it is natural that the earnest worker will emphasize the importance of the work he is doing and this presents a certain problem. As committee work increases in importance each committee looks for increased funds to carry on their investigations, and for increased powers that it may put into effect some of their conclusions.

The necessity for correlating the activities of the various committees has been brought before the Executive Committee by Doctor Luce and fully concurred in. These activities must be correlated else there will be overlapping and unnecessary work and, where an approach is to be made to the public, confusion will almost always result. A closer contact between the committees and the secretary is advisable. Committee secretaries might well be instructed to send in full reports of each Committee meeting and committee activities, these reports to be transmitted to the Executive Committee at their next monthly meeting.

From time to time it seems necessary to state that committees must not give out information before official action has been taken or take unto themselves powers which have not been delegated to them. Under the By-laws notices which may be interpreted as definitely official should go out from the Secretary's office. These provisions are necessary for the proper correlations of society activities and for the maintenance of society unity.

The State Secretary's office and all its facilities are available at all times to every Committee.

EMERGENCY WELFARE RELIEF

I quote from a letter received from Mr. Haber, State Relief Administrator, in which he says: "I am sure you will be interested to know that for a first attempt, it (the State Emergency Relief) has worked remarkably well."

From the many letters which have come into this office and from such other information as is available to me, I am led to believe that the profession will, in general, concur with this statement. On the whole, the work has gone on with a fair degree of satisfaction. Certain areas have apparently had little reason to complain. Others have not fared so fortunately. I surmise that in those areas from where complaints come most frequently the fault lies most often with the County Administrator who does not understand the medical relief problem and is unsympathetic to both the doctor and the sick indigent.

Many of the writers of the letters which have come into the office have confused the function of the FERA with the County's responsibility. They have not understood that the welfare medical relief stops at the hospital door. The apparently well founded complaints in regard to the impositions placed upon the profession by Supervisors and other County officers remain largely a local problem. As desirous as the State Society may be to help, there is little that we can do. The exception to this has to do with hospitalization under the Afflicted Child Law passed last year. The injustice of this law seems so apparent that we have reasons to hope that the Legislative Committee may be successful in having the obnoxious clause removed at this session of the legislature.

Recently we have had many complaints in regard to the reduction of mileage allowance to 12½c a mile. I have written Mr. Haber calling his attention to the inadequacy of this allowance for the doctor who ploughs through bad roads and snow drifts and he has promised to take up this matter with his committee.

There have been no official criticisms presented to this office in regard to the failure of the doctor to cooperate. Apparently in largest measure the individual doctor has done his part, done it willingly, promptly and for only a fraction of his regular fee.

There remain some points of difference which would seem to suggest the desirability of our Advisory Committee again meeting with the State Relief Committee. Such a meeting I feel would be most advantageous in clearing up many of the minor misunderstandings.

ADMINISTRATION

For more than twenty years the details of administering the affairs of the Society have been under one man. In that period there has been a tremendous growth in membership. There has been the development of new concepts as regards the responsibility of the Society to its members which have demanded a great increase in our activities along many different lines. There has been an increasing acceptance of our responsibility to society, and this has added still further activities. The central office is a busy place. An excellent system for handling its financial affairs, and satisfactory equipment which permits relatively easy handling of correspondence, form and stock letters, has been developed by the former secretary.

A general knowledge of the secretary's problems obtained by the chairman of the council from contact over the years has made it possible for your acting secretary to keep the machinery going with relatively little squeaking. There is more detail associated with the work than was anticipated. For example, each renewed membership must be handled six times, each bit of advertising copy about the same number of times, and there seems to be no way of avoiding this.

Members feel free to and do consult the office on many different matters. Inquiries come in to the secretary from all over the country with a sprinkling of foreign letters. Just now inquiries having to do with welfare work and economics predominate, for information and advice is requested on most diverse matters. Last year the secretary reported an average of twelve letters a day from members and laity seeking such information and advice. We have not kept a record, but I know of one mail with more than forty pieces of first class matter.

It is most desirable that every effort be made by the secretary to make his office of the greatest assistance to every member. The office should be, as it tries to be, a reliable source of information to which any doctor, be he a member or not, any business man, any layman, can turn and receive a courteous, intelligent and authoritative answer to his inquiry.

As I close this report may I take occasion to express to you my appreciation of your many kindnesses to me, the support that you have given me over the years that I was honored by repeated elections to the chairmanship of this Council, and again during this brief period that I have served as your acting secretary. We are facing a crucial period with movements under way the end-results of which we cannot foresee, but I have great faith in this Society and great confidence in the mass judgment of the profession. To this Council the profession looks for advice, and for conservative, wise guid-

ance. My years of association with you permit me to say with great surety, that you will meet, as you have always met, this responsibility wisely and with great earnestness, fully justifying the confidence that is reposed in you.

Respectfully submitted,

(Signed) BURTON R. CORBUS,
Acting Secretary.

January 17, 1935.

SOCIETY EXPENSE—1934

January

F. C. Warnshuis (Travel).....	\$ 50.00
Western Union	15.56
Detroit Clipping Bureau.....	5.15
Addressograph Sales Agency.....	3.10
Michigan Bell Telephone Co.....	3.90
The College of Physicians of Philadelphia	1.00
	\$ 78.71

February

F. C. Warnshuis (Travel).....	\$ 27.00
Groskopf's	10.30
Addressograph Sales Agency.....	1.04
American Medical Association.....	3.00
Detroit Clipping Bureau.....	13.25
Michigan Bell Telephone Co.....	19.55
Harry D. Beattie.....	7.50
Western Union	7.82
Dr. L. O. Geib—Reprints.....	15.00
	104.46

March

Michigan Bell Telephone Co.....	\$ 6.55
F. C. Warnshuis, Sec'y Conference.....	27.50
E. F. Sladek, Sec'y Conference.....	35.18
W. E. Ward, Sec'y Conference.....	8.50
H. B. Knapp, Sec'y Conference.....	9.60
E. C. Hansen, Sec'y Conference.....	33.74
Geo. F. Swanson, Sec'y Conference.....	30.40
J. F. Carrow, Sec'y Conference.....	30.26
L. L. Savage, Sec'y Conference.....	14.40
Jos. N. Scher, Sec'y Conference.....	7.92
L. F. Foster, Sec'y Conference.....	13.20
J. Lawther, Sec'y Conference.....	9.00
University of Mich. Union, Sec'y Conf.....	46.48
F. M. Doyle, Sec'y Conference.....	10.80
University of Michigan, Sec'y Conf.....	23.50
B. J. Graham, Sec'y Conference.....	13.80
Harold Kessler, Sec'y Conference.....	35.00
K. C. Pierce, Sec'y Conference.....	20.64
John M. Whalen, Sec'y Conference.....	18.62
Florence Ames, Sec'y Conference.....	4.80
C. G. Burke, Sec'y Conference.....	6.00
R. L. Fink, Sec'y Conference.....	7.56
F. L. S. Reynolds, Sec'y Conference.....	44.10
W. J. Herrington, Sec'y Conference.....	16.80
C. G. Clippert, Sec'y Conference.....	24.36
E. J. Evans, Sec'y Conference.....	47.72
Edwin P. Vary, Sec'y Conference.....	10.02
Arthur F. Fischer, Sec'y Conference.....	46.50
John J. McCann, Sec'y Conference.....	12.00
Western Union	3.33
Detroit Clipping Bureau.....	11.05
Addressograph Sales Agency.....	3.39
Drs. Geib and Campbell—Reprints.....	67.90
	700.62

April

F. C. Warnshuis (Travel).....	\$ 13.61
Michigan Bell Telephone Co.....	12.20
F. C. Warnshuis (Travel).....	23.86
The Durant	15.07
Addressograph Sales Agency.....	3.06
Detroit Clipping Bureau.....	10.80
Western Union	2.92
Postage and Insurance on Coupons Returned23
Master Reporting Co.....	166.86
Dr. L. O. Geib—Reprints.....	15.00
	263.61

May

Michigan Bell Telephone Co.....	\$ 17.05
Geo. LeFevre	274.00
Western Union	7.10
Addressograph Sales Agency.....	3.46
Detroit Clipping Bureau.....	15.45
	317.06

June

Michigan Bell Telephone Co.....	\$ 4.23
Addressograph Sales Agency.....	3.00
Detroit Clipping Bureau.....	17.50
Western Union	2.11
Geo. C. Lucas.....	10.00
F. C. Warnshuis (Travel).....	6.04
Dr. L. O. Geib—Reprints.....	15.00
	57.88

July		
F. C. Warnshuis (Travel)	\$250.00	
Michigan Bell Telephone Co.	9.70	
Detroit Clipping Bureau	11.70	
Addressograph Sales Agency	1.93	
Western Union	4.44	
Arthur Crabb	10.80	
		288.57
August		
George LeFevre	\$ 22.70	
Michigan Bell Telephone Co.	8.26	
Addressograph Sales Agency	1.85	
Western Union	5.51	
Detroit Clipping Bureau	7.65	
Ellsworth Letter Shop	11.00	
Addressograph Sales Agency	1.26	
		58.23
September		
Michigan Bell Telephone Co.	\$ 25.23	
Western Union	6.55	
Shank Storage Co.	43.50	
George LeFevre	140.00	
Young & Chaffee	24.00	
Columbia Storage & Transf. Co.	5.00	
Postage and Insurance on Coupons		
Returned	.68	
		244.96
October		
C. F. Jean—Janitor	\$ 5.00	
Columbia Storage & Transfer Co.	2.00	
Western Union	4.27	
Addressograph Sales Agency	1.44	
		12.71
November		
Railway Express	\$ 1.89	
C. F. Jean—Janitor	2.00	
Western Union	3.90	
Addressograph Sales Agency	1.22	
Michigan Bell Telephone Co.	8.40	
Ward-Schopps Co.	11.89	
University of Chicago Press	2.00	
		31.30
December		
C. F. Jean—Janitor	\$ 2.00	
Dr. Wm. J. Cary	1.50	
Michigan Bell Telephone Co.	21.50	
Postal Telegraph Co.	.63	
Addressograph Sales Agency	2.14	
Steketee & Sons	13.27	
Western Union	1.91	
		42.95
	\$ 2,201.06	
Less two checks returned, uncashed	12.66	
	\$ 2,188.40	
MISCELLANEOUS GENERAL OFFICE EXPENSE—1934		
January		
Interest on Note	\$ 26.25	
U. S. Laundry	.77	
H. W. Ten Broek & Sons	50.00	
Bank Charges	.66	
		\$ 77.68
February		
H. W. Ten Broek & Sons	\$ 11.00	
U. S. Laundry	1.01	
Account Written Off	20.00	
Interest on Note	25.83	
Bank Charges	.70	
		58.54
March		
U. S. Laundry	\$.31	
Ernst & Ernst	181.10	
Lights	1.08	
Accounts Written Off	16.25	
Bank Charges	.78	
		199.52
April		
U. S. Laundry	\$.80	
Underwood Elliott Fischer Co.	1.50	
Bank Charges	.78	
		3.08
May		
Maurice Pollack, Inc.	\$180.25	
U. S. Laundry	1.02	
Bank Charges	1.48	
		182.75
June		
U. S. Laundry	\$.60	
Bank Charges	.94	
		1.54
July		
Frank D. Fitzgerald	\$ 2.00	
U. S. Laundry	.60	
Bank Charges	.80	
		3.40

August		
U. S. Laundry	\$.60	
Office Furniture	50.00	
Accounts Written Off	32.50	
Grand Rapids Insurance Co.	62.50	
Bank Charges	.70	
		146.30
September		
A. M. A. Directories	\$ 24.00	
U. S. Laundry	.45	
H. & R. Sign Co.	5.00	
Rugs	52.27	
Bank Charges	.88	
		82.60
October		
Abram O. Wheeler	\$ 4.25	
Lamp	2.58	
G. R. Insurance Agency	5.78	
Box Rent	5.50	
Endorsement Stamp	.60	
Bank Charges	.78	
		19.49
November		
Underwood Elliott Fischer Co.	\$ 11.70	
Lamp and Shade	3.91	
Bank Charges	1.24	
		16.85
December		
Grand Rapids Insurance	\$ 12.50	
Bank Charges	2.48	
Accounts Written Off	169.75	
		184.73
		\$ 976.48

PRINTING, STATIONERY AND SUPPLIES EXPENSE—1934

January		
Kessler Office Supplies	\$ 14.07	
Ward-Schopps Co.	52.87	
		\$ 66.94
February		
Kessler Office Supplies	\$ 12.39	
Bixby Office Supply	2.94	
Ward-Schopps Co.	30.61	
		45.94
March		
Kessler Office Supplies	\$ 7.89	
Ward-Schopps Co.	25.73	
		33.62
April		
Ward-Schopps Co.	\$ 42.79	
The Forbes Stamp Co.	1.70	
Kessler Office Supplies	36.33	
		80.82
May		
Kessler Office Supplies		4.75
June		
Maurice Pollock	\$ 2.58	
Kessler Office Supplies	4.90	
		7.48
July		
Kessler Office Supplies	\$ 9.37	
Ward-Schopps Co.	20.09	
Maurice Pollack	3.61	
		33.07
August		
Maurice Pollack	\$ 6.18	
Kessler Office Supplies	12.16	
		18.34
September		
Kessler Office Supplies		1.34
October		
Ward-Schopps Co.	\$ 98.46	
The Forbes Stamp Co.	1.55	
Kessler Office Supplies	1.70	
		101.71
November		
Kessler Office Supplies	\$ 4.64	
Maurice Pollack	3.61	
		8.25
December		
Kessler Office Supplies	\$ 5.86	
Ward-Schopps Co.	1.65	
		7.51
		\$ 409.77
POST GRADUATE CONFERENCES EXPENSE—1934		
March		
Norman R. Kretzschmar	\$ 33.69	
Raphael Isaacs	33.69	
A. C. Furstenberg	33.69	
Chas. L. Brown	10.00	
Eugene Potter	31.90	
		\$ 142.97

May

Louis J. Hirschman	\$ 25.71
Fred H. Cole	5.50
Chas. Brown	38.69
Eugene Potter	4.80
John Muyskens	24.80

99.50

June

F. C. Warnshuis	18.39
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18.39

August

F. C. Warnshuis	9.37
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9.37

September

John L. Garvey	\$ 15.10
Chas. L. Brown	88.40

103.50

November

Chas. E. Boys	\$ 20.00
Carl D. Camp	40.00
A. M. Campbell	20.00
Fred A. Collar	20.00
John J. Corbett	20.00
Elmer L. Eggleston	20.00
Hugo A. Freund	20.00
Louis Hirschman	20.00
John T. Hodgen	20.00
C. S. Kennedy	20.00
Fred C. Kidner	20.00
Floyd H. Lashmet	20.00
Roy D. McClure	20.00
Richard M. McKean	20.00
Wm. H. Marshall	20.00
E. G. Martin	20.00
Norman Miller	20.00
John C. Montgomery	20.00
Russell L. Mustard	20.00
Louis H. Newburgh	40.00
Robert L. Novy	20.00
Wm. S. O'Donnell	20.00
Max M. Peet	20.00
Grover C. Penberthy	20.00
Heinrich A. Reye	20.00
Ward F. Seeley	20.00
Frederick Schrieber	20.00
Clyde E. Vreeland	20.00
Geo. Van Rhee	20.00
R. W. Waggoner	20.00
Udo J. Wile	20.00
Frank N. Wilson	20.00
Orus B. Yoder	20.00
John M. Dorsey	20.00

720.00

December

Wm. Blodgett	\$ 20.00
Myrton S. Chambers	20.00
Bruce H. Douglas	20.00
Daniel P. Foster	20.00
Joseph A. Johnston	20.00
Harold Henderson	20.00

120.00

\$ 1,213.73

ECONOMICS COMMITTEE

RECEIPTS AND DISBURSEMENTS—1934

Disbursements

January

Philip Riley	\$ 7.91
Hotel Statler	12.98
United States Lines	650.60
H. A. Luce—Expenses	975.00
Nathan Sinai—Expenses	653.31
Stenographic Services	325.00
Stationery, Postage, Supplies	596.09

\$ 3,220.89

March

Nathan Sinai—Salary	\$250.00
Nathan Sinai—Salary	350.00
Ellsworth Letter Shop	4.85
W. H. Marshall	6.40
Edwards Brothers	68.96
H. A. Luce (Honorarium)	500.00
Nathan Sinai—Salary	\$500.00
Nathan Sinai—Expense	11.22
Slater's, Inc.	511.22
Michigan Bell Telephone Co.	10.40
University of Michigan	43.31
O. D. Morrill	2.98
F. C. Warnshuis	3.50
I. W. Green	10.35
Nathan Sinai—Salary	48.48
Nathan Sinai—Salary	500.00

2,310.45

April

Postage	\$ 40.00
Nathan Sinai—Salary	\$500.00
Nathan Sinai—Expense	13.60

513.60

University of Chicago Press	1.74
University of Michigan	15.62
Edwards Letter Shop	.50
George Wahr	22.47
Jeannette Noble	100.00
Check Tax	.22
B. R. Corbus	100.00

794.15

May

Railway Express	\$ 6.36
Nathan Sinai—Salary	\$250.00
Nathan Sinai—Expense	70.34

320.34

Inter-State Postgraduate Ass'n	6.75
O. D. Morrill	3.50
Michigan Bell Telephone Co.	14.80
University of Michigan	9.17
University of Michigan Union	2.37
W. V. Marshall	15.00
M. Rose Nabors	10.00
University of Michigan	35.10
Milbank Memorial Fund	1.00
Check Tax	.18
O. D. Morrill	3.10
R. Welch	25.00
Jeannette Noble	100.00
Geo. Wahr	21.59
Check Tax	.10
F. A. Baker	26.79
Ellsworth Letter Shop	25.50
Hotel Owosso	13.56
Philip Riley	34.25

674.46

June

I. W. Greene	\$ 18.00
F. C. Warnshuis	16.59
F. C. Warnshuis	22.60
W. H. Marshall	219.81
Nathan Sinai—Expenses	57.10

334.10

July

L. G. Christian	\$ 40.13
O. D. Morrill	5.25
N. Sinai—Salary	375.00
Jeannette Noble	150.00
Mayer-Schairer	.93
University of Michigan	36.45
G. B. Vehn	30.00
Geo. Wahr	2.78

640.54

August

F. A. Baker	\$ 9.48
Philip Riley	11.40
Butterfield, Keeney & Amberg	150.00
Geo. Wahr	40.73
O. D. Morrill	3.50
Michigan Union	1.65
University of Michigan	.55
Michigan Bell Telephone Co.	4.23
June A. Hakes	5.00
Jeannette Noble	125.00
Nathan Sinai—Salary	\$250.00
Nathan Sinai—Expense	34.25

284.25

Postage	25.00
W. H. Marshall	62.05

722.84

September

I. W. Greene	\$ 22.20
C. T. Ekelund	1.50
Hotel Olds	5.70
W. H. Marshall	13.40
O. D. Morrill	3.50
Michigan Union	9.52
University of Michigan	23.60
Jeannette Noble	136.40
Michigan Bell Telephone Co.	12.83
N. Sinai—Salary	\$250.00
N. Sinai—Expense	25.08

275.08

503.73

October

I. W. Greene	\$ 9.60
Ellsworth Letter Shop	16.75
Hotel Hayes	9.23
University of Michigan	32.14
University of Michigan	2.89
O. D. Morrill	3.50
Geo. Wahr	10.98
N. Sinai—Salary	250.00
Jeannette Noble	125.00

460.09

November		
Postage	22.50	
December		
Edwards Bros.	\$360.26	
E. M. Espelie.....	20.00	
Geo. Wahr	17.84	
University of Michigan.....	49.27	
N. Sinai—Expense.....	4.78	
Brumfield & Brumfield.....	1.05	
Jeannette Noble.....	57.00	
Ward-Schopps	1.65	
Donald Graversen.....	1.50	
	513.35	
	\$10,197.10	

ECONOMICS COMMITTEE RECEIPTS AND DISBURSEMENTS—1934

Receipts

January		
Tracy W. McGregor Fund.....	\$3,500.00	
Sale of Survey Reports.....	7.50	
	\$ 3,507.50	
February		
Sale of Survey Reports.....	12.50	
March		
American College of Dentists.....	\$ 350.00	
Tracy W. McGregor Fund.....	2,000.00	
Sale of Survey Reports.....	46.35	
	2,396.35	
April		
Tracy W. McGregor Fund.....	\$1,000.00	
Sale of Survey Reports.....	17.50	
	1,017.50	
May		
Tracy W. McGregor Fund.....	\$1,000.00	
Sale of Survey Reports.....	25.75	
	1,025.75	
June		
Society Funds Transferred to Econom- ics Committee	\$ 500.00	
Sale of Survey Reports.....	17.50	
	517.50	
July		
Twentieth Century Fund.....	\$ 625.41	
Sale of Survey Reports.....	7.75	
	633.16	
August		
Twentieth Century Fund.....	489.91	
September		
Twentieth Century Fund.....	\$ 460.93	
Sale of Survey Reports.....	5.00	
	465.93	
October		
Twentieth Century Fund.....	\$ 424.51	
Sale of Survey Reports.....	7.50	
	432.01	
November		
Sale of Survey and Postgraduate Reports	17.50	
December		
Sale of Survey and Postgraduate Reports	7.00	
	\$10,522.61	
Receipts	\$10,522.61	
Disbursements	10,197.10	
Balance	\$ 325.51	

COUZENS. FOUNDATION

	Credit
Balance from 1932.....	\$ 39.37

JOINT COMMITTEE RECEIPTS AND DISBURSEMENTS—1934

Receipts

Balance from 1933.....	\$ 549.88
January	
Detroit News	153.84

February		
Detroit News	96.15	
March		
Detroit News	76.92	
April		
Detroit News	76.92	
May		
Detroit News	96.15	
June		
Transfer of Society Funds to This Account	\$500.00	
Detroit News	76.92	
	576.92	
August		
Detroit News	173.07	
September		
Detroit News	76.92	
October		
Detroit News	76.92	
November		
Detroit News	96.15	
	\$ 2,049.84	

JOINT COMMITTEE RECEIPTS AND DISBURSEMENTS—1934

Disbursements

January		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
	\$ 175.00	
February		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
	175.00	
March		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
The Mayer-Schairer	6.18	
	181.18	
April		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
Don C. Lyons.....	48.00	
University of Michigan.....	4.11	
	227.11	
May		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
	175.00	
June		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
	175.00	
July		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
	175.00	
August		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
O. D. Morrill.....	3.09	
University of Michigan.....	10.04	
	188.13	
September		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
	175.00	
October		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
	175.00	
November		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
Don C. Lyons.....	42.00	
	217.00	
	\$2,038.42	
Receipts	\$ 2,049.84	
Disbursements	2,038.42	
Balance	\$ 11.42	

EXPENSES—1934

	Editor Salary	Editor Expense	Rent	Postage	Reprint Expense	Secretary	Stenog- raphers
January	\$ 187.50	\$ 41.66	\$ 116.00	\$ 39.00	\$ 71.95	\$ 333.00	\$ 138.00
February	187.50	41.66	116.00	40.00	110.70	333.00	162.00
March	187.50	41.66	116.00		137.12	333.00	120.00
April	187.50	41.66	116.00	53.00	299.90	333.00	138.00
May	187.50	41.66	116.00			333.00	138.00
June	187.50	41.50	116.00	15.00	172.30	333.00	138.00
July	187.50	41.66	116.00	26.00	52.75	333.00	138.00
August	187.50	41.66	116.00	20.00	269.10	333.00	240.00
September	187.50	41.66	68.00	17.50	101.95	500.00	116.00
October	187.50	41.66	68.00	39.50		333.00	125.00
November	187.50	41.66	68.00		34.15	333.00	135.00
December	187.50	41.90	68.00		138.70	336.00	135.00
	\$2,250.00	\$500.00	\$1,200.00	\$250.00	\$1,388.62	\$4,166.00	\$1,723.00

DELEGATES TO AMERICAN MEDICAL ASSOCIATION
EXPENSES—1934

June	
H. A. Luce.....	\$ 42.50
C. S. Gorsline.....	62.00
Carl F. Moll.....	48.50
	\$ 153.00
July	
Louis J. Hirschman.....	\$ 46.20
J. D. Brook.....	58.40
	104.60
	\$ 257.60

PREVENTIVE MEDICINE EXPENSE—1934

August	
Claude R. Keyport.....	\$ 95.64
L. F. Foster.....	61.20
R. H. Holmes.....	36.84
James J. O'Meara.....	55.20
	\$ 248.88
September	
Clifford T. Ekelund.....	6.96
	\$ 255.84

LEGISLATIVE COMMITTEE EXPENSES—1934

January	
James B. Bradley.....	\$ 12.69
February	
James B. Bradley.....	\$ 40.63
Robert J. Douglas.....	30.26
	70.89
March	
James B. Bradley.....	\$ 80.74
Pantlind Hotel.....	8.24
Robert J. Douglas.....	18.85
	107.83
April	
James B. Bradley.....	35.75
May	
James B. Bradley.....	\$ 16.21
Philip Riley.....	17.15
	33.36
July	
James B. Bradley.....	\$328.81
L. G. Christian.....	19.75
	348.56
August	
Philip Riley.....	4.80
October	
Hotel Hayes.....	8.01
November	
James B. Bradley.....	\$ 78.71
B. R. Corbus.....	20.44
Philip Riley.....	25.82
	124.97
December	
James B. Bradley.....	\$189.45
Philip Riley.....	27.00
L. G. Christian.....	78.24
	294.69
	\$ 1,041.55

COUNCIL EXPENSES—1934

Note: Executive Committee Expenses are included in Chairman's and Secretary's accounts.

January	
Palmer House.....	\$ 83.75
F. C. Warnshuis.....	100.00
F. A. Baker.....	37.02
H. A. Luce.....	15.90
G. C. Hafford.....	8.47
Burton R. Corbus.....	182.93
Henry Cook.....	32.36
Ellsworth Letter Shop.....	36.50
Richard R. Smith.....	46.96
Chas. E. Boys.....	94.32
H. E. Perry.....	45.96
Thos. P. Treynor.....	20.00
H. H. Cummings.....	10.32
W. A. Manthei.....	52.68
	\$ 767.17
February	
Henry R. Carstens.....	\$ 40.46
Hotel Statler.....	40.56
Theo. Heavenrich.....	10.55
Wm. A. Hyland.....	22.00
B. H. Van Leuven.....	28.28
	141.85
March	
F. A. Baker.....	\$ 16.08
H. A. Luce.....	14.11
Henry Cook.....	31.05
	61.24
April	
Burton R. Corbus.....	69.22
May	
Hotel Olds.....	\$ 25.64
Henry R. Carstens.....	32.90
	58.54

June	
H. A. Luce.....	15.86
July	
Henry R. Carstens.....	17.01
August	
F. C. Warnshuis.....	\$ 5.28
F. A. Baker.....	40.80
Burton R. Corbus.....	89.50
J. Earl McIntyre.....	168.95
	304.53

September	
F. C. Warnshuis.....	\$ 65.84
Geo. Hafford.....	6.52
Harlan MacMullen.....	24.28
H. E. Perry.....	58.50
F. A. Baker.....	18.02
H. H. Cummings.....	6.75
W. A. Manthei.....	45.50
Burton R. Corbus.....	10.56
R. R. Smith.....	10.77
	246.74

October	
Burton R. Corbus.....	\$ 21.80
Theo. Heavenrich.....	16.70
Hotel Olds.....	11.23
Chas. E. Boys.....	9.00
Henry Cook.....	22.40
Grover C. Penberthy.....	10.00
	91.13

November	
Burton R. Corbus.....	8.94

December	
Paul R. Urmston.....	\$ 53.56
Theo. Heavenrich.....	41.44
Hotel Olds.....	19.68
H. A. Luce.....	11.85
Henry R. Carstens.....	14.13
	140.66
	\$ 1,922.89

JOURNAL EXPENSES—1934

January	
Bruce Publishing Co.....	\$485.36
Barlow Bros.....	23.18
	\$ 508.54
February	
Bruce Publishing Co.....	657.55
March	
Bruce Publishing Co.....	563.87
April	
Bruce Publishing Co.....	563.45
May	
Bruce Publishing Co.....	761.46
June	
Bruce Publishing Co.....	603.32
July	
Bruce Publishing Co.....	661.82
August	
Bruce Publishing Co.....	656.12
September	
Bruce Publishing Co.....	556.44
October	
Bruce Publishing Co.....	471.40
November	
Bruce Publishing Co.....	707.25
December	
Bruce Publishing Co.....	\$555.06
Postage.....	200.00
	755.06
	\$7,466.28

ANNUAL MEETING EXPENSES—1934

January	
A. R. Woodburne.....	\$ 18.60
February	
Ward E. Collins.....	\$ 16.80
Edward P. Wilbur.....	16.80
Merrill Wells.....	9.16
	42.76
April	
F. C. Warnshuis.....	12.56
May	
Pantlind Hotel.....	15.35
June	
Frank Mester.....	\$ 3.00
Thomas Blue Print Shop.....	4.64
	7.64
August	
F. C. Warnshuis.....	3.25
September	
Roger L. Warnshuis.....	\$ 47.00
F. C. Warnshuis.....	75.00
Emily Graversen.....	25.00
St. Louis Button Co.....	59.90
Bruce Publishing Co.....	77.98
Post Tavern.....	27.89
W. K. Kellogg Hotel.....	9.00
Loyal Davis.....	17.83
A. R. Woodburne.....	1.26
Marion B. Sulzberger.....	76.77

W. McK. Marriott	34.18	
Wm. A. Thomas	19.00	
Elliott Cutler	90.00	
Conrad Berens	50.00	
Jos. L. Baer	21.70	
		632.51
October		
Perrin H. Long	\$ 59.06	
Master Reporting Co.	157.20	
Michigan Bell Tel. Co., Battle Creek	11.00	
		227.26
November		
P. A. Bendixen		31.80
	\$ 991.73	
Credit for Exhibit Booths Sold.....	970.18	
	\$ 21.55	

MEDICO-LEGAL DEFENSE

RECEIPTS AND DISBURSEMENTS—1934

Receipts

January		
Dues	\$ 367.17	
February		
Dues	537.45	
March		
Dues	816.00	
April		
Dues	\$829.75	
Interest on Bonds	165.00	
		994.75
May		
Dues	383.10	
June		
Dues	255.98	
July		
Dues	178.75	
August		
Dues	\$ 59.00	
Interest on Bonds	265.34	
		324.34
September		
Dues	54.00	
October		
Dues	28.08	
November		
Dues	42.00	
December		
Dues	\$ 28.50	
Interest on Bonds	125.00	
		153.50
	\$ 4,135.12	
Less Adjustment made by Auditors..	226.00	
	\$ 3,909.12	

Disbursements

January		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Wm. J. Stapleton, Jr., Expense.....	4.10	
Douglas, Barbour	461.50	
	\$ 548.93	
February		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Douglas, Barbour	25.00	
	108.33	
March		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Douglas, Barbour	106.50	
	189.83	
April		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Wm. J. Stapleton, Jr., Expense.....	5.53	
Douglas, Barbour	951.70	
Theron Langford	100.00	
	1,140.56	
May		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Douglas, Barbour	456.88	
	540.21	
June		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Douglas, Barbour	629.19	
	712.52	
July		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Wm. J. Stapleton, Jr., Expense.....	12.09	
Douglas, Barbour	297.80	
	393.22	
August		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Douglas, Barbour	474.97	
	558.30	
September		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Douglas, Barbour	189.40	
	272.73	

October		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
National Law Ptg. Co.....	22.98	
		106.31
November		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Wm. J. Stapleton, Jr., Expense.....	1.56	
Douglas, Barbour	364.05	
National Law Ptg. Co.	249.19	
		698.13
December		
Wm. J. Stapleton, Jr., Salary.....	\$ 83.33	
Douglas, Barbour	100.00	
		183.33
	\$ 5,452.40	
Receipts	3,909.12	
Loss	\$ 1,543.28	

CANCER COMMITTEE EXPENSE—1934

March		
Railway Express	\$ 8.76	
Postage	46.50	
	\$ 55.26	

RADIO COMMITTEE EXPENSE—1934

November		
W. J. Stapleton, Jr.	\$ 2.00	

Grand Rapids, January 7, 1935

Michigan State Medical Society,
Grand Rapids, Michigan.

We have made an examination of the balance sheet of the MICHIGAN STATE MEDICAL SOCIETY as at December 24, 1934, and of the statement of income for the fiscal year ended at that date. In connection therewith we examined or tested accounting records of the Society and other supporting evidence, and obtained information and explanations from the Secretary and bookkeeper of the Society; we also made a general review of the accounting methods and of the operating and income accounts for the year, but we did not make a detailed audit of the transactions.

In addition to our examination of the balance sheet and statement of income, we made certain test checks of the recorded cash transactions and of other data supporting the accounts and records, as hereinafter outlined. We also reviewed the receipts and disbursements in the several funds administered by the Society.

The Society was incorporated on September 17, 1910, under the laws of the State of Michigan as a corporation not for pecuniary profit. It is affiliated with the American Medical Association, and charters the county medical societies within the State. The purpose of the Society is the federation and protection of the medical profession and the extension of medical knowledge. The Society publishes THE JOURNAL of the Michigan State Medical Society.

FINANCIAL ANALYSIS

The balance sheet included herein, in our opinion, fairly presents the position of the Society as of December 24, 1934, on the basis outlined in this report. The following summary shows a comparison of the assets and liabilities at the beginning and end of the year:

	Dec. 24 1934	Dec. 23 1933	Increase Decrease
Cash	\$ 3,405.80	\$ 1,044.43	\$ 2,361.37
Notes and accounts receivable	781.77	1,482.73	700.96
Securities—at cost, less allowance	20,710.00	18,310.00	2,400.00
Deferred expenses		54.62	54.62
	\$24,897.57	\$20,891.78	\$ 4,005.79
Liabilities			
Notes payable	\$ 2,500.00	\$ 2,500.00	
Accounts payable	537.80	889.87	352.07
Unearned Income	1,012.11	928.75	83.36
Reserve for Medico-Legal Defense Fund	11,139.75	11,808.03	668.28
Net worth	12,207.91	4,765.13	7,442.78
	\$24,897.57	\$20,891.78	\$ 4,005.79

Notes receivable—for dues—represent the uncollected portion of notes accepted in payment of dues for the years 1931, 1932 and 1933. During the year, notes due from individuals who were delinquent in dues for the year 1934 were written off as uncollectible.

Accounts receivable from advertisers and exhibitors were analyzed as to date of charge, and are classified in comparison with the balances at December 23, 1933.

The balance due from county societies represents dues collected for the Society and subsequently impounded in depository banks, and is to be paid as the funds are released by the banks.

Accounts receivable for medical histories sold are accounts carried over from previous years with but \$5.60 liquidated during the year.

Based upon our analysis of the notes and accounts, and conference with the Secretary and bookkeeper as to their collectibility, it is our opinion that the allowance in the amount of \$650.00 is sufficient to care for losses anticipated at the date of this report.

An exhibit of bonds owned is included as a part of this report which sets forth the par value, cost, and quoted market values as of December 24, 1934. Unlisted securities have been valued from information furnished by brokers as to the latest bid and sales prices.

As far as we could ascertain, provision has been made for all known liabilities at December 24, 1934. Unexpended balances in funds administered by the Society are as shown by the books, without adjustment for unpaid invoices and expenses. The receipts and disbursements in these funds are summarized in exhibits included as a part of this report.

Remittances for 1935 dues have been shown as unearned income, and, in our opinion, represent income applicable to the ensuing year.

An analysis of the changes in the Medico-Legal Defense Fund is included as an exhibit herein. It will be noted that the income of \$3,945.62, consisting of \$1.00 from each member's dues and of interest received on bonds, was inadequate to cover expenses incurred during the year and resulted in a net reduction of \$1,506.78 in the amount available for legal defense. During the previous year an amount of \$2.00 from each member's dues was allocated to this fund. Attention is directed to the fact that the Society general fund is utilizing a portion of the assets belonging to the Medico-Legal Defense Fund, inasmuch as cash on hand at December 24, 1934, is not sufficient to make up the difference between the total fund and the net value of bonds held for the Medico-Legal Defense Fund.

Net worth of the Society increased \$7,442.78 during the year, of which \$1,525.00 was due to a reduction in the provision made in prior years to reduce securities to approximate market values. The increase of \$5,917.78 from operations was partially attributable to the increase in the proportion of dues allocated to the Society activities.

Surety bonds on the Secretary and Treasurer in the amounts of \$5,000.00 and \$25,000.00, respectively, were examined by us.

OPERATIONS

We have made an examination of the statement of income and expense for the fiscal year ended December 24, 1934, and in connection therewith we ex-

amined or tested accounting records of the Society and other supporting evidence, and obtained information and explanations from the Secretary and bookkeeper; we also made a general review of the accounting methods and of the operating and income accounts for the year. The scope and extent of our tests of the detail of transactions during the year are outlined in a later section of this report.

The income of the Society increased in excess of \$5,000.00, due principally to the allocation of a higher percentage of dues to the Society, as heretofore stated, and to revenue from the JOURNAL.

The reduction in committee expenses was in part responsible for the better showing for the year, although all other classifications showed increased costs. Expense accounts for the year ended December 23, 1933, have been reclassified to compare with the expenses shown for the current year.

SCOPE OF EXAMINATION

The scope and nature of our examination and the extent of the tests of the detail transactions are outlined in the following comments:

Cash on deposit was verified by direct correspondence with the depository bank and reconciliation of the balance thereby reported with the amount shown herein. Cash receipts for several months were traced to deposits as shown by bank statements on file. The recorded cash disbursements for three months selected by us were compared with canceled checks, invoices and other memoranda.

Notes receivable were inspected by us during the course of our examination. Advertisers' and other accounts were found to be in agreement with trial balances of the individual accounts. We did not correspond with any of the debtors to confirm the correctness of the book records.

Bonds owned were inspected by us and quotations were obtained to ascertain their approximate market value at December 24, 1934.

We did not correspond with vendors as a test of the accounts payable.

In addition to the tests heretofore outlined, we tested the amount of dues collected by comparison with the record of membership certificates issued and with the membership records. Interest received was verified by inspection of unclipped coupons. We also reviewed the disbursements made in the various funds administered by the Society and found a large percentage of the disbursements to be supported by statements or other memoranda. Many disbursements made for the account of the Economics Committee were not supported by original invoices, these having been retained by the Director to support vouchers paid directly by him.

In our opinion, based upon our examination, the accompanying balance sheet and statement of income fairly present, on the basis herein outlined, the position of the Society at December 24, 1934, and the results of its operations for the year. Further, it is our opinion that the statement has been prepared in accordance with accepted accounting principles and on a basis consistent with the preceding year, except for the reduction in the portion of membership dues allocated to the Medico-Legal Defense Fund.

ERNST & ERNST,

Certified Public Accountants.

BALANCE SHEET
MICHIGAN STATE MEDICAL SOCIETY
DECEMBER 24, 1934

Assets			
Cash			
On deposit—Old Kent Bank		\$ 2,872.05	
Certificate of deposit—Old Kent Bank		533.75	
			\$ 3,405.80
Notes and Accounts Receivable			
For dues	\$ 140.00		
For advertising	65.00		
		\$ 205.00	
Accounts receivable:			
Advertisers and exhibitor	\$ 1,026.73		
Due from county societies	108.64		
For medical histories	91.40		
		1,226.77	
		\$ 1,431.77	
Less allowance for doubtful		650.00	
			781.77
Securities			
Bonds—at cost		\$41,518.75	
Less allowance to reduce to quoted market value		20,808.75	
			20,710.00
			<u>\$24,897.57</u>
Liabilities			
Accounts Payable			
Advances for reprints and advertising			\$ 161.50
Liability for Funds Administered			
Economics Committee—McGregor Fund	\$ 325.51		
Couzens Foundation	39.37		
Joint Committee on Public Health Education	11.42		
			376.30
Unearned Income			
Dues for the year 1935			1,012.11
Reserve			
For Medico-Legal Defense Fund			11,139.75
Net Worth			
Balance at December 24, 1933	\$ 4,765.13		
Net gain for the year ended December 24, 1934	5,917.78		
Reduction in allowance to reduce bonds to approximate market value	1,525.00		
			12,207.91
			<u>\$24,897.57</u>

This balance sheet is subject to the comments contained in this report.

INCOME AND EXPENSE
MICHIGAN STATE MEDICAL SOCIETY

	Income	FISCAL YEAR ENDED		INCREASE DECREASE
		Dec. 24, 1934	Dec. 23, 1933	
Membership fees		\$20,010.85	\$16,021.50	\$ 3,989.35
Journal subscriptions		5,172.22	4,789.67	382.55
Advertising sales		7,037.00	6,750.79	286.21
Reprint sales		1,689.15	1,249.28	439.87
Interest received		1,146.33	1,210.01	63.68
Journal cuts sold		247.94	115.27	132.67
Miscellaneous income		17.66	10.00	7.66
		\$35,321.15	\$30,146.52	\$ 5,174.63
Expenses (As Shown by Exhibit)				
Administrative and general office		\$ 8,775.14	\$ 8,519.56	\$ 255.58
Society activities		4,114.71	3,191.76	922.95
Committee expenses		3,568.38	8,261.70	4,693.32
Journal expenses		12,706.64	11,424.68	1,281.96
		\$29,164.87	\$31,397.70	\$ 2,232.83
Other Deductions				
Loss on bonds sold, less allowance provided		\$ 238.50	\$ 350.00	\$ 350.00
Bad accounts charged off and provided for			479.25	240.75
		\$ 238.50	\$ 829.25	\$ 590.75
		\$29,403.37	\$32,226.95	\$ 2,823.58
NET INCOME OR DEFICIT		\$ 5,917.78	\$2,080.43	\$ 7,998.21

EXPENSES
MICHIGAN STATE MEDICAL SOCIETY

	FISCAL YEAR ENDED		INCREASE DECREASE
	Dec. 24, 1934	Dec. 23, 1933	
Administrative and General			
Secretary's salary	\$ 4,166.00	\$ 4,000.00	\$ 166.00
Stenographers' salaries	1,723.00	1,739.00	16.00
Office rent	1,200.00	1,400.00	200.00
Printing, stationery and supplies	409.77	286.04	123.73
Postage	250.00	432.34	182.34
Auditing	181.10	202.87	21.77
Insurance and fidelity bonds	136.00	145.00	9.00
Interest paid	52.08	140.69	88.61
Furniture and equipment purchased	282.52		282.52
Moving and storage expense	85.77	12.00	73.77
Telephone and telegraph	202.62	93.36	109.26
Unclassified	86.28	68.26	18.02
	\$ 8,775.14	\$8,519.56	\$ 255.58

Society Activities			
Annual meeting, less income from exhibits.....	\$ 21.55	\$ 462.42	\$ 440.87
Council expenses	1,922.89	913.67	1,009.22
Delegates to American Medical Association.....	257.60	217.09	40.51
Secretary's conference	608.40	761.08	152.68
Traveling expense	807.21	437.56	369.65
Reporting—annual meeting	166.86	192.51	25.65
Sundry society expense	330.20	207.43	122.77
	<u>\$ 4,114.71</u>	<u>\$ 3,191.76</u>	<u>\$ 922.95</u>
Committee Expenses			
Legislative committee	\$ 1,041.55	\$ 2,538.80	\$ 1,497.25
Post-graduate conference	1,213.73	278.75	934.98
Economics committee—appropriation	500.00	25.61	474.39
Joint committee on public health education—appropriation.....	500.00	-----	500.00
Cancer committee	55.26	-----	55.26
Preventive medicine	255.84	20.00	235.84
Survey of medical services and health agencies.....	-----	5,378.08	5,378.08
Radio committee	2.00	-----	2.00
Civic and industrial relations committee.....	-----	20.46	20.46
	<u>\$ 3,568.38</u>	<u>\$ 8,261.70</u>	<u>\$ 4,693.32</u>
Journal Expenses			
Editor's salary	\$ 2,250.00	\$ 2,500.00	\$ 250.00
Editor's expenses	500.00	649.28	149.28
Printing	7,316.28	6,072.57	1,243.71
Reprints	1,388.62	995.70	392.92
Discount and commission on advertising sales.....	1,101.74	1,207.13	105.39
Postage	150.00	-----	150.00
	<u>\$12,706.64</u>	<u>\$11,424.68</u>	<u>\$ 1,281.96</u>
TOTAL	<u>\$29,164.87</u>	<u>\$31,397.70</u>	<u>\$ 2,232.83</u>

RECEIPTS AND DISBURSEMENTS—ECONOMICS COMMITTEE
MICHIGAN STATE MEDICAL SOCIETY
FISCAL YEAR ENDED DECEMBER 24, 1934

Receipts		
Tracy McGregor Foundation	\$ 7,500.00	
Twentieth Century Fund, Inc.	2,000.76	
Michigan State Medical Society.....	500.00	
American College of Dentists.....	350.00	
Proceeds from sale of reports of committee on Survey of Medical Services and Health Agencies.....	171.85	
	<u>171.85</u>	\$10,522.61
Disbursements		
Nathan Sinai—director's salary.....	\$3,475.00	
Nathan Sinai—expenses	1,386.78	
H. A. Luce—expenses	975.00	
H. A. Luce—honorarium	500.00	
U. S. Lines—passage	650.60	
Stenographic and clerical salaries.....	918.40	
Committee expenses	693.93	
Stationery, postage and supplies.....	1,018.17	
Edwards Brothers—printing	429.22	
Butterfield, Keeney & Amberg—opinion.....	150.00	
	<u>10,197.10</u>	
BALANCE DUE ECONOMICS COMMITTEE—December 24, 1934		<u>\$ 325.51</u>

RECEIPTS AND DISBURSEMENTS—JOINT COMMITTEE ON
PUBLIC HEALTH EDUCATION
MICHIGAN STATE MEDICAL SOCIETY
FISCAL YEAR ENDED DECEMBER 24, 1934

Balance Due Joint Committee—December 24, 1933		\$ 549.88
Receipts		
The Detroit News—for articles published.....	\$ 999.96	
Michigan State Medical Society—contribution.....	500.00	1,499.96
		<u>\$2,049.84</u>
Disbursements		
Salaries:		
Mabel Kelly	\$ 1,100.00	
Herman Riecker	825.00	
	<u>\$1,925.00</u>	
Don E. Lyons	94.11	
Miscellaneous	19.31	
	<u>2,038.42</u>	
BALANCE DUE JOINT COMMITTEE—December 24, 1934		<u>\$ 11.42</u>

MEDICO-LEGAL DEFENSE FUND
MICHIGAN STATE MEDICAL SOCIETY
FISCAL YEAR ENDED DECEMBER 24, 1934

Balance—December 24, 1933			\$11,808.03
Income			
Dues from members.....	\$ 3,390.28		
Interest received	555.34		
		\$3,945.62	
Expenses			
Douglas, Barbour, Dusenberg & Purdy—legal services.....	\$ 4,079.97		
William Stapleton, Jr.—salary.....	999.96		
National Law Printing Corporation—briefs.....	249.19		
Dr. Theron Longford—for legal defense.....	100.00		
Miscellaneous expenses	23.28		
		5,452.40	1,506.78
			<u>10,301.25</u>
Reduction in allowance to reduce bonds to approximate market value.....	\$ 875.00		
Less notes receivable for dues charged off.....	36.50		
			838.50
BALANCE—December 24, 1934			<u>\$11,139.75</u>
Represented by:			
Bonds owned (at approximate market value).....	\$ 7,340.00		
Balance not set aside in general fund.....	3,799.75		
			<u>\$11,139.75</u>

THE JOINT COMMITTEE ON PUBLIC HEALTH EDUCATION

Thirteen years ago the President of our Society, the late Dr. W. J. Kay of Lapeer, with Dr. J. B. Kennedy, chairman of the Committee on Education, and the Secretary, Dr. F. C. Warnshuis, met with the late President Burton of the University and Professor Henderson, to propose a program of health education designed to inform the people of the state on the advances in medical science, and what the medical profession was prepared to offer in disease prevention and cure. The thought of our officers was that information coming through the medium of an educational and neutral body with the prestige of the University of Michigan would probably be more readily accepted by the public than if it came directly from a group which might have personal interests. After numerous discussions the University consented to assume the direction of a campaign which contemplated programs of health lectures and demonstrations in the school systems of the state and to all adult groups that could be interested in the crusade for better and more wholesome living.

Limitation of space prevents the recital of this most effective and interesting experiment. Suffice at this time to say that at the height of the program approximately 600 physicians and dentists were lecturing before schools, parent-teacher organizations and other groups to a total of 220,000 a year in 1931. At this time, due to unfavorable economic conditions, many of our profession felt they could not incur the travel expense involved in keeping speaking engagements and the Extension Division of the University, on account of diminished income, had to withdraw a field man, whose salary the University had been paying, and whose job it was to arrange the school programs and otherwise direct the undertaking. Thus, these most valuable contacts which had grown from a few hundred in 1923 to almost a quarter million in 1931, have dropped to a negligible number during the depression.

During the years one group after another has allied itself with the Joint Committee until every responsible health agency in the state is now represented.

Seven years ago the *Detroit News*, dissatisfied with the professional attitude of the health column

it was then using, requested the Joint Committee to undertake for it a health column, believing that the various health interests engaged in the program of the Joint Committee on Public Health Education would reflect more accurately the professional attitude of the various groups and would be accepted as more authoritative by its readers.

After further consideration of the obligations involved, the Committee decided upon taking over this work and has conducted a daily health column, together with answers to some 5,000 questions a year on health matters since 1927. The column has reached from one to two million readers a year through the *Detroit News* and the other state papers which have utilized it, reaching the high mark of its circulation just before the financial crash of 1929 and its low point one year ago, since when the circulation has again been steadily upward. Until this year the column has been self supporting financially, but there will probably be a slight deficit this year, after which, if the circulation increases as the last few months have seemed to indicate, the column will again take care of itself financially.

Those of us who have followed the Health Column believe it to be a useful agent in educating the public to the sources and possibilities of the best medical service.

On January 8 the Joint Committee met. There were present representatives from practically all its affiliated members. After a very full discussion of the value of its methods and objectives, the Committee decided upon going forward with its program, until at least July 1, at which time there will be a meeting of the Committee to decide whether or not the various agencies concerned feel the contacts made are of sufficient interest to the public and of sufficient value to themselves to justify its continuance.

As stated in its announcement, "The function of the Joint Committee is to present to the public the fundamental facts of modern scientific medicine for the purpose of building up sound public opinion relative to the questions of public and private health. It is concerned in bringing the truth to the people, not in supporting or attacking any school, sect, or theory of medical practice. It will send out teachers, not advocates."

During the next six months, the program will be

renewed with all the vigor with which it was formerly prosecuted. This will be made possible through the loan of an experienced organizer and well-trained physician as a field worker by the University for half-time service, towards whose travel expenses—the expenses of necessary publications, postage, et cetera, the sum of \$1,000.00 was voted for use during this period.

The reason I am bringing this subject before you at this time is because of the possible danger of our losing one of the most worthwhile contacts with the public which our Society has made if the Joint Committee is not encouraged to continue. With the public thinking so seriously on medical problems, and lay groups assuming responsibility for direction in health matters in an unprecedented way, we will agree, I believe, that every possible effort should be employed to keep the public fully informed as to the objectives of organized medicine.

The Joint Committee has shown that it can make satisfactory contacts with the public as evidenced by audiences of 220,000 in one year. The potentialities of this agency already established impress me as being very great. We have several committees, and especially the Preventive Medicine Committee and the Cancer Committee, whose major activities lie in the field of lay education.

Both of the above committees have made requests for funds for this purpose. In many State Societies there is set up a Committee on Lay Education. Here in Michigan we have this unique organization with the machinery for operation and with long experience all in place for us. Instead of attempting to make new contacts and duplicating efforts, would it not be well for these committees to join with the Committee on Public Health Education for which this Society was originally responsible and with which it is now the most important affiliate? The identity of the committees need in no way be submerged through joining forces with the Joint Committee. Rather, indeed, they might well take over and help direct the fields in which their responsibilities lie in the larger organization. Through the machinery thus set up they will at once have an audience which might take years to develop. May I suggest that any allocation of funds be made with the view of centralizing our program in the Joint Committee of which the Secretary of the State Society acts as treasurer. If it is deemed necessary these funds may be earmarked for special educational programs.

THE EDITOR'S REPORT

Probably there is no activity of the Michigan State Medical Society that is so open to inspection by its members as the JOURNAL. *Si quæris monumentum circumspice* is the epitaph of a famous architect. I might juggle this quotation in some such way as this: *Si quæris famam Journalis Michiganensi civitatis medici societatis, circumspice*. The twelve numbers of the 1934 JOURNAL are already in your hands. With the coöperation of the printer, it has been possible, I believe, to produce a medical magazine of great artistic merit. I might say the demand for space for contributed articles in the JOURNAL is as great as ever. This, of course, makes possible a selection of papers which the Editor hopes has met with the approval of the members of the Society.

As the years pass, the subject of economic medicine becomes more pressing. To deal editorially with subjects as they arise requires sometimes greater judgment than the Editor feels he possesses, and here is where the Publication Committee have ren-

dered able assistance. It has been my custom each fall to attend a convention of state Editors and I may say the trend of editorial discussion has been towards the economic and social phases of medicine. The state of Michigan is unique; it ranges from the most highly industrialized to the most agrarian. This condition of economic life reflects itself in those who serve the needs of the people as physicians. The medical problems vary with geographical areas. The Editor, however, has endeavored to represent the whole profession, avoiding undue emphasis on problems of such a nature that their adjustment is a matter of time.

As we emerge from the depression it is hoped that the scope of the JOURNAL may be enlarged in keeping with the demands of the society.

The coöperation of acting-secretary and Editor has been of the most cordial character and as a result there has been no duplicating of material.

All of which is respectfully submitted,

J. H. DEMPSTER.

TREASURER'S REPORT

Members of the Council:

I have the honor to present to the members of the Michigan State Medical Society my report as Treasurer for the year 1934.

As required by the by-laws of the Society, the usual indemnity bond was filed with the State Secretary.

The following bonds are now in my holding:

General Fund

Am. Telephone and Telegraph Co.....	5%	\$2,000
Associated Gas and Electric Co.....	5%	2,000
Community Power & Light Co.....	5%	2,000
G. R. Affiliated Corp.....	5%	6,000
Herald Square Building.....	6%	2,000
Lower Broadway Properties, Inc.....	6%	2,000
National Electric Power Co.....	5%	5,000
New England Gas & Electric Co.....	5%	1,000
Pennsylvania Railroad Co.....	5%	3,000
Peoples Light & Power Corp.....	5½%	1,000
United Light & Power Corp.....	5½%	2,000

Medico Legal Defense Fund

Am. Telephone and Telegraph Co.....	5%	2,000
G. R. Affiliated Corp.....	5%	1,000
International Telephone & Tel. Co.....	5%	2,000
National Gas & Electric Co.....	5½%	2,400
New England Gas & Elec. Co.....	5%	1,000
N. Y. Central Railroad Co.....	4%	2,000
Peoples Light & Power Corp.....	5½%	1,000
Public Gas and Coke Co.....	5%	3,000

The following bonds were returned to me by Dr. F. C. Warnshuis on April 9, 1934:

Am. Telephone and Telegraph Co.....	5%	\$2,000
Int. Telephone & Telegraph Co.....	5%	2,000
Pennsylvania Railroad Co.....	5%	1,000

These bonds were used as collateral to a note for \$2,500 given on July 26, 1933, which was paid on February 26, 1934.

The National Electric Power Co. coupons were returned to me—the bonds being in default—no interest is available.

The Peoples Light and Power Co. paid half of the coupons due July 1, 1934, of \$25.00 each, or \$12.84—Total \$25.68.

In lieu of the Certificate of Deposit covering Michigan Fuel and Light Co. Bond I received \$3,000 Public Gas and Coke Co. 5% bonds, due in 1952.

I attach hereto your Auditor's rating.

Respectfully,

WILLIAM A. HYLAND, Treasurer.

REPORT OF THE MEDICO-LEGAL COMMITTEE

The Secretary of the Medico-Legal Committee submits the annual report for the year 1934. The Secretary desires to thank the members of this committee for their coöperation. To the chairman of the committee, Dr. Angus McLean, is due a special word of thanks for his constant help and counsel.

Thanks are also due Mr. Herbert Barbour, our attorney, and Mr. Clayton of his office for their great help in carrying on the work of this committee. Mr. Barbour's report will be included as part of this committee's work. The intercourse between the Committee and Mr. Barbour's office has been most cordial. The thanks of the committee are also due to our former secretary, Dr. F. C. Warnshuis, and to our present acting-secretary, Dr. B. R. Corbus.

We also want to express our appreciation of the valuable service rendered us by Dr. W. C. Woodward of the Medico-Legal Committee of the A. M. A. in several special matters.

Thanks are also due Dr. Dempster for several articles in the JOURNAL on the evils of malpractice.

As in the previous year's reports, we again call the attention of the medical profession to the numerous malpractice cases. The cases listed do not include the many threats received by physicians which have not as yet reached the court stage. Some of these are just blackmail with no justification whatsoever.

We feel that every physician should be on his guard constantly so as to avoid any reason, real or alleged, for a malpractice suit. We suggest a reading of the cases listed in order that one can obtain some idea of the variety of alleged malpractice suits; everything from negligence to undue familiarity and worse is listed. It behooves every one of us, general practitioners and specialists, to be very careful how we act toward people who come to us for care. Especially true is this where the patient complains about treatment received from another physician. An unwise statement, the shrug of the shoulder or a skeptical tone may be the basis for a malpractice suit. Again, we stress the old fact that x-rays should be taken in all fracture cases before and after reduction and before discharge. If the patient refuses or can not pay for an x-ray, or gives some other excuse, *look out*. Courts now hold that the exercise of ordinary skill and care requires the use of x-ray films in diagnosis and treatment. They always seem to have the money for an x-ray to produce in court when they sue. Have the X-ray Laboratory furnish a written report and file with your notes.

It is also wise to pay particular attention to any cases taken care of for the Welfare, or in the various projects sponsored by the City, State or National Government. Be sure all records are in good condition. Do not be afraid to have consultants in your fracture cases or any unusual case, either medical or surgical.

The question of what constitutes a correct and sufficient examination has been fought out in the Courts. It arises quite often as to whether certain matters such as blood counts, taking of temperature and the method of examination are sufficient.

Again, we suggest that doctors acquaint themselves with their rights and liabilities under the law. We suggest the reading of one of the following books, which will be of great help when preparing to testify in court:

Medical Jurisprudence—Charles Scheffell, M.D.
P. Blakiston's Sons, Pub.

Court and Doctors—Lloyd P. Stryker. MacMillan, Pub.

The Doctor in Court—Edward H. Williams, M.D.
Williams & Wilkins, Pub.

Percival's Medical Ethics. Williams & Wilkins, Pub.

The malpractice suit is now classified as a form of "racket" to use the slang word of the day. No physician can afford to practice without protection of some kind. All doctors should belong to their State Society so as to form a strong front against malpractice. Verdicts are being given against physicians in all sorts of cases by juries. Some of these have been very large. Some suits are brought against doctors because it is thought that being insured there is a chance to make some money from the insurance companies.

The secretary has been in communication with Dr. W. C. Woodward of the American Medical Association, chairman of the Medico-Legal Department, in regard to forms for "Permission to Operate." This was the result of an inquiry from one of our members. We have incorporated the correspondence and forms in this report as we feel they are of much value to the surgeon.

The Committee would like to call the attention of physicians to the matter of delegation of duties to nurses and assistants. Be careful about permitting nurses to do any difficult work, to operate x-ray, diathermy or other apparatus. The use of wrong solutions in the bladder and eye, the burns from machines, broken needles and negligence in dressings is stressed. The doctor is liable because injury is a violation of duty on the part of the doctor, he is allowing an unlicensed person to practice medicine.

We can not go into all the matters we would like to in a report, but we do suggest the keeping of careful records, the getting of written permission to operate, to perform autopsies and where a patient will not follow a doctor's recommendation to get a written refusal.

In the matter of collection of fees: There are numerous cases where malpractice suits are threatened as an offset for fees. We suggest that in Michigan the physician wait until the Statute of Limitations is over; this is two years. Then in a suit for fees malpractice can not be used as a basis for a suit.

A word regarding the sterilization of the male: The best thought is not to do this operation where no medical reason exists. If the operation is done, explain the possible result and obtain and file away a full written consent signed by both husband and wife properly witnessed.

Your secretary has been acting on a Committee with Dr. W. C. Woodward, Director of the Bureau of Legal Medicine and Legislation of the American Medical Association, and Dr. Ludwig Hektoen in regard to "The Committee on Uniform Crime Records" as part of "An Act Creating a Bureau of Criminal Identification, Investigation and Statistics." We have also been working on the matter of the "Establishment of Medico-Legal Institutes." Your secretary attended the American Medical Association meetings of the Forensic Medicine Section, we also had personal discussion with Dr. Woodward on Medico-Legal matters.

Respectfully submitted,

WILLIAM J. STAPLETON, JR., Secretary.

REPORT OF PUBLICATION COMMITTEE

At the last meeting of the Publication Committee of the JOURNAL, which was held in Pontiac last August, the present and future policies of the JOURNAL were discussed. During the months of June, July and August, we ran, as an experiment, the County Society news first, but at the expiration of

that period we concluded to return to our former order of contents; for the reason that it permitted contributed papers to be set in type and organized into pages earlier in the month, leaving the latter part of the JOURNAL for the reception of important news items of events occurring later in the month.

The Council and House of Delegates may ask why we go out of the state to have the JOURNAL printed. The reason is that we are able to save, we believe, from two to three hundred dollars a month in printing; and besides the financial saving to our Society, we believe the quality of the printing and the care with which it is done is immeasurably superior to any work that has been done on the JOURNAL since it was founded in 1902. The Company printing our JOURNAL specializes in medical publications.

The outlook for revenue through advertising sources seems more favorable than for several past years. You will notice several full pages of advertising, new ones recently added, for which we have a year's contract. The Acting-Secretary is negotiating with a young man in Detroit, whereby we hope to increase the number of advertisers of non-medical products, such as automobiles, clothing, etc. The JOURNAL has made less demand on the general budget of our Society than any other of the projects; inasmuch as its income has been so well maintained by its advertising.

We believe that the quality of the JOURNAL papers contributed is excellent, perhaps due to the number of meritorious papers from which our editor may make selection. We endeavor to have editorials reflect the general sentiment of the entire medical profession throughout the state, and we believe that the news items are a commendable feature of our publication. You will notice in the January number that there has been a change in the headings all through the JOURNAL from a thin letter to a small black-face letter. This was done to make the headings more prominent, and, we believe, more artistic.

Your Committee will appreciate and welcome any suggestions or constructive criticism you may have to offer.

The above report is respectfully submitted for your consideration by the Publication Committee of the JOURNAL.

(Signed) A. S. BRUNK
H. H. CUMMINGS
J. E. MCINTYRE

The Council accepted the Secretary's report and directed that respective sections be referred to the Finance Committee, the Committee on County Society and the Publication Committee.

Editor's Report: The Council on motion, properly seconded and unanimously carried, accepted the report of the Editor, and gave formal expression of appreciation to the Editor, the Publication Committee and the Secretary for the excellence of the JOURNAL as to literary merit, editorial copy, appearance and satisfactory financial condition.

The Report of the Medical-Legal Defense

Committee: The Council accepted the report of the Medical-Legal Defense Committee as presented by its Secretary, Dr. Wm. J. Stapleton, Jr. Feeling that the profession was not fully informed as to their legal rights and obligations, the Secretary of the Medical-Legal Defense Committee was requested to formulate a circular letter containing such information and the Secretary of the Society was directed to send this circular letter to the Secretary of each County Society for presentation to the members.

The Council accepted the report of the Radio Committee through the Secretary, Doctor Stapleton.

The Secretary reported that he had attended a meeting of the Scientific Section officers on the evening of January 16, with each Section represented. The program, as proposed, seems most satisfactory. The Section Officers are taking a great deal of interest and some of the out-of-town speakers have already accepted their invitations. The group went on record as objecting strongly to the interruption of Section Meetings, necessitated by the custom of having the installation of the President in the forenoon. They request that for this reason and in order to more properly honor the President, the Presidential Address be given at some evening meeting.

The group directed the Secretary to present to the Council the following recommendation:

"We recommend that there be established, as an appreciation for his outstanding services to the Society, the Andrew Biddle Lectureship, the lecture to be on a pertinent scientific subject by some outstanding investigator and to be given on the first evening of the General Session of the Annual Meeting following the address of the Retiring President, and that this speaker be selected by the President in consultation with the appointed representative of this Scientific Section Group."

"We recommend that special recognition be given this speaker, to take the form of an engraved brochure or in some other suitable manner indicate the Society's appreciation of the man and his work. It is our thought that the way might be left open to change the name of the Lectureship from time to time as and when the Society desired to honor some other member."

The report of the Secretary of the activities of the Section Group was accepted. Following a discussion which indicated a unanimous approval of the above recommendation, the matter was left to the Executive Committee to be put into effect.

ANNUAL MEETING AND TIME OF MEETING

The Secretary presented an invitation from Genesee County, giving detailed information in regard to hotel accommodations and places of meeting, together with blue prints showing how the requirements would be met.

Doctor Perry presented the advantages of Sault Ste. Marie for the meeting.

The presentations were followed by a vote by ballot. The result of the ballot was Sault Ste. Marie 11, and Flint 5. On motion properly seconded and carried, the date for the meeting was set for September 23, 24 and 25.

A number of communications were presented by the Secretary which were referred to Committees.

The Council recessed at 1:20 p. m. to convene again at 2:45 p. m.

SECOND SESSION OF THE COUNCIL

The Council convened in second session in the Statler Hotel at 2:45 p. m., January 17, 1935.

Present—All Councilors who were present in the morning session and, as guests during the late afternoon, Doctors Rector, Yates, Brines and Slemons.

The Committee appointed for the purpose of securing a Secretary for the Society, Dr. R. R. Smith, Chairman, Drs. C. E. Boys, H. E. Luce and B. H. Van Leuven, announced that they were ready to report. Doctor Corbus retired from the room while the appointment of a Secretary was under consideration. He requested that since he was also Councilor, Doctor Smith, from his district, be vested with his proxy.

Doctor Smith read the six applications which were before his Committee and considered the qualifications of each man seriatim, presenting also such telegrams and letters as had been received by the Committee from units of the Society or members in reference to the matter. The Chairman reported that his Committee had gone into the subject thoroughly and had considered the various possibilities in connection with the matter. In doing this it endeavored to ascertain the feeling of the profession relative to the type of Secretary desired. It was the opinion of the Committee that the profession of the state, on the whole, preferred a physician Secretary who would de-

vote part time to the office. The Committee recommended that Doctor Corbus be continued as Secretary until after the Annual Meeting of the Society next September.

After carefully considering the matter of a successor to Doctor Corbus, it was the opinion of the majority of the Committee that, everything considered, their choice would be Dr. C. T. Ekelund of Pontiac.

Dr. H. A. Luce presented his minority report with the statement that he favored a full time lay secretary and sponsored in particular the application of Mr. W. J. Burns. Doctor Luce later withdrew his minority report explaining that he felt that there should be a physician secretary to whom the lay secretary should be responsible.

Then followed a lengthy discussion on the question of a lay secretary versus a physician secretary and a part time secretary versus a full time secretary, each Councilor speaking in turn on the matter. The matter finally came to a vote on motion of Doctor Boys, seconded by Doctor Cummings, that the Council employ a part time medical secretary for 1935. This motion was carried unanimously. It was then moved by Doctor Brunk, seconded by Doctor Boys, that Doctor Corbus be elected Secretary until after the Annual Meeting. This motion was carried unanimously.

Following this it was determined to have an unofficial ballot on the candidates. The first unofficial ballot being inconclusive, a second ballot was taken with Dr. C. T. Ekelund receiving the majority of votes.

It was moved by Doctor McIntyre, seconded by Doctor Baker, that the balloting be considered official and that Doctor Ekelund be elected as Secretary to serve from September 30 to the Mid-Winter Meeting of the Council. This was carried.

At this juncture, Dr. F. L. Rector, Field Secretary of the American Society for the Control of Cancer, present by invitation, was introduced and addressed the Council on the objectives of the American Society for the Control of Cancer and on the survey now being conducted in Michigan. The Council was also addressed by Dr. H. Wellington Yates, State Chairman for the American Society for the Control of Cancer, who was in turn followed by Dr. O. A. Brines, reporting for the Cancer Committee

of the State Society. Doctor Brines asked for an appropriation of one thousand dollars for laity education on cancer.

Dr. L. O. Geib of the Committee on Preventive Medicine, reported for his committee.

The Council now turned to the election of officers and Dr. J. H. Dempster was re-elected Editor, Dr. Wm. A. Hyland was re-elected Treasurer, and Dr. Wm. J. Stapleton, Jr., re-elected Secretary of the Medical Legal Defense Committee.

The report of the Committee on County Societies followed, Dr. C. E. Boys, Chairman.

REPORT OF COMMITTEE ON COUNTY SOCIETIES

1. The Committee endorsed the report of the Acting Secretary relative to Committees and recommended that no committee reports be released except through the Secretary's office and thought it should be emphasized that committees must not expend funds without authorization from the Council regardless of the source of such funds.

2. The Committee recommended that the annual meeting of the County Secretaries be held at a time and place to be determined by the Executive Committee and the Secretary.

3. In regard to the work of the Joint Committee on Public Health Education, the Committee recommended a continuation of its activities and that the Council go on record as willing to continue the Society's financial support to this cause.

4. Postgraduate Opportunities—The Committee endorsed the continuance of the Postgraduate activities, extending them as rapidly as seems feasible.

5. Communications—In reference to the correspondence from Wayne County Medical Society relating to transferring FERA cases from the Workmen's Compensation Law to the usual FERA rates, the Committee suggested that the Secretary request a meeting between the State Emergency Welfare Committee and our Advisory Committee, appointed for conference purposes, that this matter, together with certain collateral matters, may be considered.

6. Regarding a communication from Doctor Cassidy relating to the Afflicted Child Act, the Committee made no recommendation.

7. The Committee suggested that a communication from Doctor Cassidy in regard to the New York Dispensary Law be referred to the Legislative Committee for their consideration.

8. Regarding Doctor Garipey's communication which had reference to lectures on Ethics and Economics to be given to students, with a second step referring to Internes, the Committee suggests that the matter might well be left with the County Society's Committee for further study.

9. The Committee endorsed the Secretary's report on Administration.

Upon motion, the report of the Council's Committee on Society Activities was adopted as read.

REPORT OF THE FINANCE COMMITTEE

The Finance Committee's report was considered at length with much discussion. The

final vote for its adoption was delayed until the evening session so that certain alterations might be made in the original budget. At the evening session, upon motion by Doctor Carstens, seconded by Doctor Heavenrich, the report as given below was adopted:

(a) That the financial report of the Secretary, accompanied by the auditor's report, be accepted.

(b) That the following budget for the year 1935 be adopted.

Budget for 1935

Income	
3,350 Members @ \$8.50.....	\$28,475.00
Interest	1,200.00
	\$29,675.00
Appropriations	
Defense Fund (3,350) @ \$1.50.....	\$ 5,025.00
Journal Subscription (3,350) @ \$1.50.....	5,025.00
Rent	1,000.00
Annual Meeting	1,200.00
Post Graduate Activities.....	800.00
Committee Expense:	
Cancer	\$500.00
Preventive Medicine	400.00
Special Committees	250.00
Economics Committee	500.00
Joint Committee	500.00
	2,150.00
Legislative Committee	2,000.00
Council Expense	1,800.00
Postage	400.00
Ptg., Stationery and Supplies.....	400.00
Delegates to A. M. A.....	600.00
Stenographic	2,000.00
Committee Reserve	2,000.00
Contingent Fund	1,275.00
Secretary's Salary	4,000.00
	\$29,675.00

Journal Budget Income	
Advertising (Net).....	\$ 6,000.00
Subscriptions	5,025.00
Reprint Profit	150.00
Individual Subscriptions and Sales.....	150.00
	\$11,325.00
Expenses	
Printing	\$ 7,800.00
Editor's Salary	3,000.00
Postage	200.00
Reserve	325.00
	\$11,325.00

THIRD SESSION OF THE COUNCIL

The meeting was called to order at 8:15 p. m.

Present: Councilors as of afternoon session, Speaker Luce, President Smith, President-elect Penberthy, Ex-president Hirschman, Treasurer Hyland, Chairman of Legislative Committee Bradley, Doctor Garipey and Doctors Marshall and Bruce.

The chairman announced the personnel of the newly appointed Economics Committee—Dr. W. H. Marshall, Flint, Chairman; Dr. I. W. Greene, Owosso; Dr. F. A. Baker, Pontiac; Dr. R. H. Pino, Detroit; Dr. F. N. Smith, Grand Rapids.

He then called upon Doctor Marshall, who discussed the planned activities of his committee and forecasted the probable problems which would have to be met. As a part of his report he recommended a rapid survey

of the numerous patterns of medical relief in Michigan and a more intensive study of selected counties. With the results of the studies as a background, it is proposed that recommendations for the administration of relief be prepared and presented to those agencies—national, state or local—that may be charged with the administration of work or other relief.

On motion, properly seconded and carried, Doctor Marshall's report was accepted and the committee directed to proceed with the survey of medical relief in Michigan.

Dr. J. D. Bruce spoke on the plans for the year's joint Postgraduate work, and, as chairman of the Postgraduate Advisory Committee, reported for this committee.

REPORT OF LEGISLATIVE COMMITTEE

Doctor Bradley, chairman of the Legislative Committee, presented the report of his committee, giving an outline of the present activities and the proposed program.

President Smith opened the discussion which followed the reading of this report by saying that he desired certain further information. He stated that information had come to the members of the Executive Committee to the effect that there had been a solicitation of funds from individual doctors for the purpose of hiring a professional lobbyist. President Smith pointed out that the Executive Committee, while very appreciative of the splendid work of Doctor Bradley and his committee, have not been in entire sympathy with certain policies suggested by them, in particular a plan for the employment of a professional lobbyist. He stated that the action and feeling of the Executive Committee had been placed before the Legislative Committee by him in a personal interview. He stated that he desired now to know if the Legislative Committee had, without waiting for the Council's action, proceeded with the policy proposed by it. He did not mean at the moment to open a discussion of legislative policy. The Executive Committee has been fully conscious of the fact that there is a difference of opinion in the profession as well as among the councilors, in this regard. It has tried to ascertain the sentiment of the profession, and has had an expression in writing from each councilor. The point at issue is not, at the moment, a question of

legislative policy, but concerns the determination of society policy by committee, and the expenditure of funds without authority.

Doctor Bradley, in answering, stated that the Legislative Committee as such had not solicited funds, nor had they employed a lobbyist. However, that through financial aid furnished by members of Ingham County, and by a group of thirty doctors from different parts of the State in a meeting in Lansing, he thought that some arrangement had been made with a lobbyist, and he, as chairman, had placed at his disposal a Mr. Lambert for the purpose of helping him to further legislation. He understood that Mr. Lambert had been promised a contingent fee of six thousand dollars, but he did not know this to be a fact.

Doctors Gariepy and Hyland, of the Legislative Committee, confirmed the statement that the Legislative Committee as a committee had taken no action relative to this matter, and both stated that they did not approve of this action.

A prolonged discussion as to legislative policies followed, and in conclusion the following motions were made, properly seconded and carried unanimously:

1. Motion by Doctor Heavenrich, seconded by Doctor Cummings,
That the Council adopts the definite policy that we do not employ a professional lobbyist. Carried.

(Doctor Cummings makes a definition of the professional lobbyist as one who is recognized as gaining a livelihood by attempting to promote or prevent legislation.)

2. Motion by Brunk, seconded by Corbus,
That the Legislative Committee be instructed that it is not to accept the services of a professional lobbyist.
3. Motion by Carstens, seconded by Urmston,
That the Executive Committee be directed to call a joint meeting of the Legislative Committee as promptly as possible in order that the Legislative Committee may receive from them the action of the Council in regard to Legislative policies and discuss with them further legislative activities. Carried.
4. Motion by Cook, seconded by Urmston,
That the secretary be instructed to promptly send a letter to each county secretary containing the substance of

the above motions, with the request that the county secretary read it at the next meeting of his society. Carried.

5. Motion by McIntyre, seconded by Boys, That the report of the Legislative Committee, as presented by Doctor Bradley, be accepted and referred to the Executive Committee for action. Carried.
6. Motion by Luce, seconded by McIntyre, That the Executive Committee be authorized to employ a lay Executive Secretary to work under the Medical Secretary, if and when the Executive Committee deems it expedient or advisable. Carried.
7. Motion by McIntyre, seconded by Heavenrich, That the chairman appoint a committee of three to meet with Mr. Knudson in a matter of common interest. Carried.

Doctor Carstens presented the revised budget postponed from the afternoon meeting.

On motion by Doctor Carstens, seconded by Heavenrich, the motion to adopt was carried.

Adjournment at 11:50 p. m.

BURTON R. CORBUS, *Secretary*.

THE THERAPY OF THE COOK COUNTY HOSPITAL: THERAPY OF ECZEMA (DERMATITIS)

Bernard Fantus, Chicago, in his report on the therapy of eczema (dermatitis) as it is practiced at the Cook County Hospital, gives the cause as two-fold: an irritant (exciting cause) and a special irritability (predisposition) of the skin. Without the latter, one has to deal with simple acute dermatitis. Eczema is always a chronic disease, with, however, a tendency to acute exacerbations. The exciting causes may be chemical, mechanical, thermal, actinic, allergens and microorganisms. The predisposing causes may be found in the condition of the skin, digestive disturbance, nutritional disturbance, allergy, systemic disease, focal infection, circulatory impairment and disturbance of the nervous system. Local therapy requires the recognition of the acute, the subacute and the chronic stage. Several prescriptions are given for ointments and lotions. If causal systemic treatment is not required, and even when it is, restorative therapy (in the presence of anemia iron may be used or cod liver oil to improve nutrition) and alterative therapy may be employed. Alkalis (potassium citrate or acetate) enough to alkalinize the urine may be useful in acute stages. Arsenic, while contraindicated in the acute form, may be useful in chronic cases characterized by dryness and thickening of the skin. (*Journal A. M. A.*, Oct. 27, 1934.)

WOMAN'S AUXILIARY

MRS. F. T. ANDREWS, *President*, Kalamazoo.
MRS. F. M. DOYLE, *Secretary*, Kalamazoo.

"What do we live for, if it is not to make life less difficult to others?"

The words of George Eliot can be applied to our duty to our Auxiliaries.

May we all resolve to work more earnestly and harder to secure new members, help on programs and give assistance to the work assigned by the Medical Society; to take active interest in medical legislation, increased distribution of *Hygeia* and many other activities.

The Woman's Auxiliary to the State Medical Society extends a cordial invitation to wives, mothers, daughters and widows of physicians and sisters of the members in good standing of your County Society.

If no Auxiliary exists in your county, get busy and ask for the endorsement of one from your County Society, as that must be secured before organizing.

Certainly the women who are eligible to membership will not hesitate to pledge allegiance to the medical profession.

Your Organization Chairman wishes to congratulate the Woman's Auxiliary to the Wayne County Medical Society on the splendid Year Book, which has just been issued.

Your committees show how thoroughly organized you are and the marvelous program for the year gives promise of most interesting subjects. Thank you for my copy!

Which will be the first county to organize in 1935? Let's go *over the top*.

Doctor: Please take your copy of the STATE JOURNAL home to your wife.

(MRS. GUY L.) JOSEPHINE KIEFER,
Chairman State Organization.

Wayne County

The Public Relations Committee of the Wayne County Auxiliary issued the following letter on December 18, 1934:

Dear Madam:

Knowing that your organization stands for all that is progressive and helpful for humanity, we wish to give your membership the opportunity to share with us, the Woman's Auxiliary to the Wayne County

Medical Society, three lectures which will be free to the public.

The first will be on Friday, January 11, 1935, at two o'clock in the Grand Ballroom of the Book Cadillac on "Common Sense in the Health Program," by Thurman B. Rice, M.D., Indianapolis, Indiana.

The second will be on Friday, February 1, 1935, at two o'clock in the Crystal Ballroom, Book Cadillac, "The Nature, Curability and Prevention of Cancer," by Frank L. Rector, M.D., Chicago, Illinois, Field Representative of the American Society for the Control of Cancer.

The third will be on Friday, March 1, 1935, at two o'clock in the Crystal Ballroom of the Book Cadillac, "Food Fads," by Morris Fishbein, M.D., editor of the *Journal of the American Medical Association*.

Each of these speakers has popular appeal and is outstanding in his field. We would not be generous if we failed to share with you and your members the really great privilege of hearing these men.

All we ask is that you make known this invitation to your membership and urge a large attendance. You will find further details in the daily papers.

Very sincerely,

(MRS. EDW. G.) KATHARINE MINOR,
(MRS. BASIL L.) ISABEL G. CONNELLY,
Chairmen, Public Relations Committee.

On December 14, at 2:00 p. m., the Wayne County Auxiliary held its regular meeting at the Society headquarters. Miss Marguerite Dutton, Chief Investigator of the Medical Service Bureau of the Wayne County Medical Society, was guest speaker, her subject being, "The Public Be Served."

Drs. Clarence E. Umphrey, Chairman of Membership, Wayne County Medical Society, and David S. Brachman, Chairman of the Detroit Community Fund Committee, Wayne County Medical Society, spoke briefly. Dr. Umphrey's subject was "How the Doctor Can Serve Himself," and Dr. Brachman discussed the rôle of the Woman's Auxiliary in the Detroit Community Fund. Hostesses for the afternoon were Mesdames Ralph H. Bookmeyer, Leo P. Rennell, L. G. Jentgen, L. J. Foster, E. V. Mayer and Henry B. Steinbach. Presiding at the tea table were Mesdames Allan W. McDonald and Louis J. Morand.

A What-Not and Bake Sale (the first in a series of three to be sponsored by the Ways and Means Committee during the year) was conducted by Mesdames J. H. Chance and A. J. DeNike. Each member was requested to contribute.

The Women's Auxiliary to the Wayne County Medical Society seems to have been so busy during the past few months with its various activities that it has been dilatory about reporting those activities to the *JOURNAL* of the Michigan State Medical Society.

At the opening meeting of the auxiliary in October, Wm. J. Burns, LL.B., executive secretary to the Wayne County Medical Society, struck the keynote of the year's work when he outlined the tasks ahead of the medical profession. Mr. Burns feels this year to be a crucial one, particularly in the field of legislation, and urged the auxiliary to give all possible assistance to measures designed to safeguard the interests of our doctors. Mrs. Frank W. Hartman, the new president of the Auxiliary, assured Mr. Burns that the interests of the medical society were the interests of the auxiliary, as our organization exists chiefly to be of service to them. In order to be more efficiently of service to that society Mrs. Hartman urged a one hundred per cent coöperation between the doctors' wives of the

city. "This program not only necessitates an increase in membership," said Mrs. Hartman, but a willingness on the part of the present members to give generously of time and strength to carry out the year's work."

Mrs. G. Henry Mundt, of Chicago, who was the organizer and first president of the Chicago auxiliary, stressed the necessity of an intermediary between the medical profession and the general public. Mrs. Mundt feels that the auxiliaries to the medical societies should act as these intermediaries and carry to the lay women in clubs, churches and social gatherings accurate knowledge along medical lines.

With the serious work of the year outlined and well under way in charge of the program committee headed by Mrs. Wm. O. Merrill, the November meeting was devoted to the "Bring Your Husband Dinner," a delightful affair whose popularity was attested to by an attendance of nearly three hundred. Gaiety reigned—old friends exchanged greetings—new friendships were made—and the program so cleverly announced by Mr. Malcolm W. Bingay, Editor of the *Detroit Free Press*, was most enjoyable. In the absence of Dr. Merton S. Rice, Mrs. Rice gave the invocation. Mrs. Hartman welcomed the members and guests, and the president of the Wayne County Medical Society, Dr. Wm. J. Cassidy, brought greetings from that organization. Mrs. Thelma von Eisenhauer and her brilliant accompanist, Mrs. Edwin S. Sherrill, charmed the audience with their musical selections. Anne Campbell, *Detroit News* poet, said amusing things about "The Doctor," and Edgar A. Guest, *Detroit Free Press* poet, most beautifully toasted "The Doctor's Wife." The surprise of the evening came in response to the number, "Songs by the assembly, led by Mr. Harry A. McDonald." On all sides were heard voices whose owners most surely would have made grand opera had they not first drifted into the medical profession.

Professor Gus W. Dyer, dean of the school of economics at Vanderbilt University, gave an interesting and rather unusual talk on "The Big Show in Washington." Professor Dyer said that the depression was nature's surgical operation to save us from our own folly and stupidity; that in order to restore the patient to health, some scheme must be thought out to *develop* them—not to feed them. "The emblem of America is an eagle—not an oyster," Professor Dyer asserted.

The December meeting of the auxiliary was one of great practical value. Miss Marguerite Dutton, chief investigator, medical service bureau of the Wayne County Medical Society, spoke on "The Public Be Served"; Dr. C. E. Umphrey, chairman of the Membership Committee of the Wayne County Medical Society, told us "How the Doctor Can Serve Himself," and Dr. David S. Brachman, Chairman of the Detroit Community Fund committee of the Wayne County Medical Society, discussed "The Rôle of the Auxiliary in the Detroit Community Fund." Tea was served after this meeting and the finances of the society were augmented by a "What-not and Bake Sale."

Two of the most charming events of the year were put on during the holiday season under the sponsorship of the Wayne County Medical Society. The party arrangements were in charge of Mrs. Audrey O. Brown and members of the social committee. Miss Georgina Merrill put on a one act play, "The Fool," for the children's party on December 15 and each little guest brought a gift for some child less fortunate.

The second gala affair given the day after Christmas was a holiday dance, cabaret style, for the young people of the members and their friends.

Miss Olga Fricker acted as dancing hostess, assuring a happy time for every one in attendance.

The auxiliary is looking forward to a series of three meetings which have been arranged by the Public Relations Committee under the leadership of Mrs. Edward G. Minor. Lecturers for these meetings have been secured to speak on subjects pertaining to the maintenance of health in the home and the community. The public is being urged to attend all of these meetings, which are given free of charge.

Many new members are coming into the organization due to the splendid work of the membership committee under the leadership of Mrs. Claire L. Straith.

(MRS. FRED'K) FLOY T. MUNSON,
Press Chairman.

Saginaw County

Bright silver tinsel and colorful Christmas tree ornaments in an unusually lovely arrangement decorated the dinner table at the delightful party which members of the Auxiliary to the Saginaw County Medical Society enjoyed Thursday evening, December 20, at the Hudson Party House. Mrs. Dale E. Thomas was the speaker of the evening, telling of "Current Medical Topics." A short business session took place, followed by a social evening with Mrs. Robert Jaenichen and her committee in charge.

OBITUARY

Dr. H. Edward Knight

Dr. H. E. Knight of Detroit was killed January the twenty-seventh when his car ran into a bridge which was under repair on U. S. Highway twenty-three, two and a half miles south of Standish. Dr. Knight was driving north on a hunting trip. He was born in Detroit forty-two years ago; he was a graduate of Loyola University and had been in practice seventeen years. He was a member of the staffs at Providence and Harper Hospitals and had offices in the David Whitney Building. He was a member of the Wayne County Medical Society, Michigan State Medical Society and the American Medical Association. Dr. Knight was a member of the Blue Lodge (Masonic), the Consistory and Moslem Shrine. Surviving him are his mother, Mrs. Etta L. Knight, and a sister, Mrs. Viva LaVanway.

Dr. Lewis E. Maire

Dr. Lewis E. Maire, who practised medicine in Detroit for fifty years, died at the age of seventy-nine years at his home, Grosse Pointe. Dr. Maire had been sick for nearly a year. He retired from practice four years ago. He was born in Philadelphia of French Huguenot ancestry. Dr. Maire attended and was graduated from the Detroit College of Medicine in 1881. He was at one time president of the Wayne County Medical Society and was the oldest member of the Detroit Academy of Medicine. He was one of the founders of the Detroit Ophthalmological Society. Dr. Maire will be remembered by the older members of the profession as a quiet dignified person, kindly in manner and devoted to his professional specialty. He leaves his wife, who was Florence M. T. Davis; four daughters, Mrs. William L. Donaldson, of Evanston, Illinois; Mrs. Lewis B. Wright, Mrs. Walter M. Parker and Mrs. Clyde L. Fulton, of Detroit; and five sons, Lewis E., Jr., former superintendent of Water Works Park, and Julian, Lincoln, Stephen and Dr. Edward Maire, all of Detroit.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

A New District Health Department

With the establishment on January first of a new district health department in the Upper Peninsula, three counties were added to the list of 32 already having full-time county or district health department service. The new district department is made up of Luce, Schoolcraft and Mackinac Counties.

Organization of the new department was made possible by a recent grant from the United States Public Health Service supplemented with a grant from the Children's Fund of Michigan and the usual contribution from the state and the counties. Dr. A. R. Tucker, Dr. R. E. Spinks and Dr. J. F. Darby, health officers in the county seats of Luce, Schoolcraft, and Mackinac Counties, were particularly active in bringing about the formation of the department.

The addition of a sanitary engineer to the personnel of the health departments in Lake, Ottawa, Oceana, Newaygo, Kent, Isabella, Midland, Genesee and Oakland Counties was also made possible by a recent grant from the United States Public Health Service. The same appropriation provided for an additional public health nurse in each of the counties of Emmet, Ottawa, Genesee, Kent and Oakland.

Talks to County Medical Societies

Announcement was recently sent to the secretaries of county medical societies by the state commissioner of health that physicians from the State Department of Health were available to speak before county societies on the use of the biologic products manufactured and distributed by the state.

Already invitations have been received from the following societies: Muskegon, Schoolcraft, Manistee, Alpena, St. Clair, Menominee, Mecosta, Monroe, Jackson, Gogebic, Hillsdale, Tri-County Medical Society, and Washtenaw. Other secretaries have replied that as soon as the new officers were able to organize their programs, the matter would be taken up.

It would be well for any society that has not already sent in its request for a speaker and wishes to have one, to send it without further delay, since schedules are now being made.

Michigan Laboratories Licensed for Doing Serologic Tests for Syphilis

The Michigan Department of Health is required by statute to check the accuracy and dependability of laboratories doing the serum diagnosis of syphilis. The following laboratories have complied with the regulations and have been licensed to do the serologic tests for syphilis in the State of Michigan.

The Michigan Department of Health Laboratories make the tests free for those who cannot afford to pay for the service. These licensed laboratories will serve the physicians where the patient can pay the regular commercial fee for the test.

Reg. No.	Name of Laboratory	Location	Director
167	Allergic and Clinical	Grand Rapids	H. G. Swenson, M.D.
76	Brosius Laboratories	Detroit	W. L. Brosius, M.D.
13	Bay City Health Department	Bay City	L. B. Harrison
9	Battle Creek Sanatorium	Battle Creek	Paul Roth, M.D.
162	Buesser Laboratory	Detroit	F. G. Buesser, M.D.
40	Brotherhood Private	Grand Rapids	J. S. Brotherhood, M.D.
91	Bronson Methodist Hospital	Kalamazoo	H. R. Prentice, M.D.
46	Borgess Hospital	Kalamazoo	H. R. Prentice, M.D.
38	Blodgett Memorial Hospital	Grand Rapids	W. M. German, M.D.
37	Butterworth Hospital	Grand Rapids	W. M. Stevenson, M.D.
59	Central Laboratory	Saginaw	O. W. Lohr, M.D.
100	Clark Clinical	Detroit	H. L. Clark, M.D.
170	Clinical Laboratory	Benton Harbor	H. L. Galehouse
18	Children's Hospital	Detroit	M. K. Patterson, M.D.
108	Clinton Memorial Hospital	St. Johns	T. Y. Ho, M.D.
116	Cottage Hospital	Grosse Pte.	P. F. Morse, M.D.
140	Chas. Godwin Jennings Hospital	Detroit	S. W. Wallace, M.D.
164	Detroit Endowment and Clinical	Detroit	I. J. Zimmerman, M.D.
1	Detroit Department of Health	Detroit	J. A. Kasper, M.D.
141	Diagnostic Clinic	Monroe	C. J. Golinvaux, M.D.
17	Delray General Hospital	Detroit	H. E. Cope, M.D.
166	Dearborn Clinical	Dearborn	C. A. Christensen, M.D.
113	Evan. Deaconess Hospital	Detroit	A. B. Pranian
97	Eloise Hospital	Eloise	S. E. Gould, M.D.
156	Fairview Sanatorium	Detroit	R. I. Greenidge, M.D.
136	Florence Crittenton Hospital	Detroit	A. L. Amolsch, M.D.
21	Grace Hospital	Detroit	C. I. Owen, M.D.
44	Highland Park General Hospital	Highland Park	P. F. Morse, M.D.
168	Hart Clinic	St. Johns	T. Y. Ho, M.D.
176	Havers Laboratory	Detroit	H. Havers, M.D.
36	Hurley Hospital	Flint	G. R. Backus, M.D.
22	Henry Ford Hospital	Detroit	F. W. Hartman, M.D.
73	Harper Hospital	Detroit	P. F. Morse, M.D.
94	Hamtramck Department of Public Health	Hamtramck	P. A. Klebba, M.D.
146	Jackson Department of Health	Jackson	Doris Wilson
11	L. Y. Post Montgomery Hospital	Battle Creek	A. A. Humphrey, M.D.
163	Larkum Clinical Laboratories	Lansing	N. W. Larkum, Ph.D.
51	Macomb County Laboratory	Mt. Clemens	S. J. Peltier
142	Medical Clinical	Detroit	N. E. Aronstam, M.D.
54	Mercy Hospital	Muskegon	A. A. Spoor, M.D.
23	Meinke Laboratories	Detroit	H. A. Meinke, M.D.
0	Michigan Department of Health	Lansing	C. C. Young, D.P.H.
3	Michigan Department of Health	Houghton	Ora M. Mills
2	Michigan Department of Health	Grand Rapids	P. L. Kendrick, Sc.D.
104	Mercy Hospital	Monroe	R. W. McGeoch, M.D.
177	Michigan Bell Telephone Co.	Detroit	H. S. Brown, M.D.
14	Mercy Hospital	Bay City	W. G. Gamble, M.D.
111	Wm. H. Maybury Sanatorium	Northville	H. S. Willis, M.D.
24	National Path. Laboratories	Detroit	F. J. Eakins, M.D.
157	Nottingham Clinical	Detroit	Harriet B. Ainslie
158	Nottingham Clinical	Grosse Pte. Park	Harriet B. Ainslie
57	Oakland County Department of Health	Pontiac	V. K. Volk, M.D.
25	Owen Clinical	Detroit	R. G. Owen, M.D.
128	Pontiac State Hospital	Pontiac	E. A. Christian, M.D.
26	Physicians' Service	Detroit	M. S. Tarpinian
56	Pontiac Department of Health	Pontiac	C. A. Neafie, M.D.
120	Port Huron Hospital	Port Huron	Irene Dexter
118	Pawating Clinical	Niles	Alice Gracy, M.D.
88	Parkside Hospital	Detroit	R. I. Greenidge, M.D.
27	Providence Hospital	Detroit	J. E. Davis, M.D.
83	Roseville Department of Health	Roseville	F. T. Zieske, M.D.
28	Receiving Hospital	Detroit	O. A. Brines, M.D.
41	St. Mary's Clinical	Grand Rapids	G. L. Bond, M.D.
58	St. Clair County	Port Huron	Lucille Roach
5	St. Joseph Mercy Hospital	Ann Arbor	S. C. Howard, M.D.
32	St. Mary's Hospital	Detroit	J. E. Davis, M.D.
134	St. Luke's Hospital	Marquette	W. B. Lunn, M.D.
69	St. Lawrence Hospital	Lansing	L. C. Ludlum, M.D.
31	St. Joseph Mercy Hospital	Detroit	W. L. Brosius, M.D.
34	St. Francis Hospital	Escanaba	H. Defnet, M.D.
50	St. Joseph Hospital	Mt. Clemens	Isabella Kennedy
62	Traverse City State Hospital	Traverse City	R. P. Sheets, M.D.
6	University of Michigan Hospital	Ann Arbor	R. L. Kahn, Sc.D.
42	West. Michigan Clinical	Grand Rapids	T. L. Hills, Ph.D.
63	Wyandotte General Hospital	Wyandotte	C. M. Crum
117	Woman's Hospital	Detroit	M. A. Oginsky, M.D.
112	Women's Hospital	Flint	G. R. Backus, M.D.

COMMUNICATIONS

OUT IN CALIFORNIA

Here am I perched up on the twentieth floor of an office building overlooking the Bay and the Golden Gate. Just now eighty-seven of the Navy's boats are at anchor. The sun is bright, the weather warm, the fields green, no overcoat, anti-freeze nor galoshes. It is almost impossible to present a clear picture of California to those who are unfamiliar with local conditions and customs. It is a state of great distances. By the fast train it takes ten hours to travel from San Francisco to Los Angeles. To go by automobile requires about twelve hours. Travel is retarded by reason of the mountains and to reach certain regions one must go over circuitous routes.

There are some eleven thousand physicians in the state, of which number some five thousand seven hundred belong to the Medical Association. This rather low percentage of members is due to the large number of doctors retired from active practice, who come to California because of its climate. There are some twenty-three hundred members in Los Angeles and fourteen hundred members in San Francisco, Oakland, Berkeley and the Bay district. There are fifty-eight counties in the state forming thirty-nine county medical societies. There are nine councilor districts and six councilors at large, making a council of fifteen members, with an executive committee of seven members.

The Association office consists of six rooms, well equipped with a modern filing and record system. The clerical staff consists of four persons and one relief typist. With seventeen active standing committees and a voluminous correspondence, there are few idle moments in this office.

My arrival was on September 26. The chairman of the council met me on the arrival of the train at the Oakland Mole with a handful of cult literature on Initiative Nos. 9 and 17—a referendum that, if endorsed at the election November 7, would have granted unlimited, uncontrolled rights to cultists to practice medicine and surgery. That afternoon a conference was held and a program for the campaign was outlined which became my major activity in October. This campaign would require a whole article to impart its major features. Summarized, it reveals that a state-wide, county by county campaign organization was set up. Three and a half million pieces of informative literature were composed and distributed. One-quarter million post cards were provided doctors to send to their lay friends urging them to "vote 'no' on 9 and 17." The campaign was closed by a ten-day radio program at a cost of some five thousand dollars. Both measures were defeated by a state vote of three to one. Each county society raised and expended funds for county work. A rough estimate of fifty thousand dollars is made of the cost for imparting information to the public on these measures. Thus is demonstrated the profession's service for public welfare and protection, so characteristic of our concern for safeguarding human lives.

Considerable time has been devoted to visiting county societies and to date I have been to some fifteen counties. I have been tremendously impressed with the exceptionally high type of practitioners, the excellent hospitals and their contributions to scientific medicine. The five medical colleges have gained recognition and high places in the field of medical education.

The nation-wide discussion on providing medical care for lower income groups is particularly acute

and has been intensified by the deliberations of President Roosevelt's Committee on Economic Security. The California legislature, in 1933, appointed a Senate Interim Committee to study "Medical Care" and, if found necessary, to draft a bill providing medical care for this group. At hearings of this committee, the State Association has participated. Some of the hearings have been very tense by reason of the exaggerated statements of the socialistically inclined proponents who are undoubtedly pursuing the program of Eastern propagandists. The Council meets again January 19 and a special meeting of the House of Delegates is to be called in January to determine the Association's position.

The State legislature convenes January 7. A legislative provision dividing the session into two periods is very commendable. The first period lasts one month, when all bills must be introduced. Then there is a recess of one month, during which hearings on bills are held. The Legislature then reconvenes and acts on these bills. The session is limited to one hundred days. This policy concentrates all legislative representation in one month, which is a very desirable provision.

The State Association is in the midst of a state survey of medical services and health agencies—similar to but intended to be far more extensive and accurate than Michigan's Survey. Over six hundred workers are now in the field. Some fifty-five thousand dollars has been secured from the FERA and the Association has appropriated over twenty-eight thousand dollars of its funds to defray expenses. A committee composed of seven economists, members of faculties of state colleges, are advisors and their conclusions will add weight to the findings. It is expected that the report will be available in May.

Our annual meeting occurs on May 12 and 16 in Yosemite National Park. It was necessary to go to the Park to perfect arrangements. I wished Michigan men could see and be impressed by the scenery in this truly wonderful park. It beggars my description.

County Secretaries Conference, committee activities, program for the annual meeting, preparation for the visit of the British Medical Association in August, post-graduate programs, and routine office details, have left no idle time. It has been a truly busy three months. The pleasant surroundings, scenery and people have made it very happy and enjoyable.

San Francisco is a very interesting city, though its hills, steep streets and many autoists require time for one to become accustomed to driving. Its people are very friendly and hospitable, a delightful and inspiring group.

But enough. My greetings to all JOURNAL readers in whose welfare and progress I retain a fraternal, personal interest and concern, and to whom I extend my good wishes.

Sincerely,

F. C. WARNSHUIS.

JOURNAL READING DOCTOR'S WIFE

Editor, Michigan State Medical Journal:

I was much interested in two items in the January number of the JOURNAL. One was "A request of the doctor in behalf of his wife," and the other was "Dear wives of doctors," by Mrs. Charlotte Andrews.

I not only read the Michigan State JOURNAL from cover to cover, including the advertisements, but

also the *Medical Times and Long Island Journal*, to which my husband subscribes, and several of the smaller medical magazines which come every month.

A country doctor's time for reading is very uncertain, being subject to calls at all hours. So when the magazines arrive, I read them, noting articles in which I know he will be interested, and often reading them aloud to him.

I peruse all the ads of new medicines and, where samples are available, I send for them so he may have an opportunity to try them. In many cases they have worked wonders, and some are now incorporated in his regular prescription work. If he did not have a journal reading wife, there are many splendid new remedies he would not hear of.

Perhaps my interest in this has grown because my husband likes me to go along on his calls, especially those that take him miles out in the country, and many are the night calls I have answered with him. I have assisted him in homes where there was no one else to do anything for him, and no funds to hire a nurse. I have given the anesthetic in confinement cases and tried to instil courage in the patient going down into the valley of pain, and I have helped in cases of minor surgery in homes.

So perhaps I have more of an excuse for reading the medical journals than many doctors' wives, besides having a natural liking for the practice of medicine.

At any rate my husband showed one doctor's appreciation of a journal reading wife of some little time ago. He was speaking of a case which another doctor had, and I remarked, "I wonder why he did not try such and such a remedy," referring to a new product. My husband said, "Well, perhaps he has not a journal reading wife."

I am glad to say I thoroughly enjoy the medical magazines.

MRS. W. CHARLTON EDMISON.

St. Ignace, Mich.
Jan. 14, 1935.

RAGWEED DERMATITIS: REPORT BASED ON EIGHTEEN CASES

Louis A. Brunsting and C. Russell Anderson, Rochester, Minn., point out that occasional cases of a recurring, eczematous eruption have been reported during the ragweed season in the form of dermatitis venenata affecting chiefly the exposed surfaces of the body, due to an acquired sensitivity of the epidermal cells to the irritating oil of the plant as distinguished from the manifestations of allergic reaction to ragweed protein. It has been their experience to encounter rather frequently this form of dermatitis, related to season and environment, particularly among farmers and others whose residence, occupation or other contacts bring them extensively into rural districts in which ragweed is abundant. A growing interest in problems of sensitivity and a more generous application of the patch method of diagnosis enabled the authors, during the season of 1933, to identify and study eighteen cases of dermatitis due to ragweed; the cases form the basis of their report. They state that ragweed dermatitis is more common than is generally supposed. In cases of recurrent eruption in the summer, patch tests should include samples of the several ragweeds, as well as pyrethrum and turpentine. Further investigative work is necessary in experimental and clinical fields to determine the exact nature of the irritant, the factors concerned with the development of sensitivity and the mechanism of desensitization. (*Journal A. M. A.*, Oct. 27, 1934.)

GENERAL NEWS AND ANNOUNCEMENTS

Mental Hygiene

A meeting was held in Detroit January twenty-fourth to take the necessary steps towards the organization of a Michigan Society for Mental Hygiene. Dr. C. M. Hincks, director of the National Society of Mental Hygiene, was the principal speaker. He advised his hearers of the urgent necessity for such an organization. "Every mental hospital in the State," he said, "is overcrowded and has a waiting list, except the one at Newberry, and at Newberry there are 200 more patients than they have adequate facilities for." Among those who attended the meeting were: Fred Wardell, Mrs. W. D. Ryan, Maurice Aveland and Brodley T. Fowlkes, members of the Michigan Hospital Commission; Grover C. Dillman, State Welfare Director; Commissioner Heinrich A. Pickert and Miss Eleonore M. Hutzler, deputy police commissioner; Dr. Thomas K. Gruber, Superintendent of Eloise Hospital; Recorder's Judge John P. Scallen, Dr. Samuel A. Kirk, representing Dr. Robert H. Hanskell, superintendent of the Wayne County Training School; The Rev. Father E. J. Hickey, Fred A. Butzel, Sherman C. Kingsley of Philadelphia, director of the Philadelphia Welfare Federation; Dr. Albert M. Barrett, State psychiatrist; Dr. James Inch, superintendent of Ypsilanti State Hospital; Dr. H. B. Haynes of Lansing; William J. Norton, of the Children's Fund of Michigan; Edward H. Williams, County auditor, and Probate Judge D. J. Healy, Jr.

Joint Committee Resurgit

The Joint Committee on Health Education met at the Michigan Union, Ann Arbor, on January 8, after about two years during which no meeting had been held. President Ruthven acted as chairman. Professor W. D. Henderson reviewed the history of the Committee of Health Education from its beginning in 1922. Each subsequent year a department had been added until it consisted of about a dozen units throughout the State. The health education consisted of lectures chiefly to schools and Parent-Teachers' Associations as well as the publication of a health column in the various newspapers in the state. During the past three or four years the committee had not functioned with its initial vigor; however, it was the consensus of the meeting that the time was ripe for a renewal of the old policy of the committee. A smaller committee was authorized, to be appointed by the president, to investigate the situation and to report the best methods of putting the facts of scientific medicine before the people of the State of Michigan.

Medical School Administration Board

Dr. Albert C. Furstenberg has been appointed dean of the University of Michigan Medical School to succeed Dr. Frederick G. Novy, who retires as dean of the medical school to become dean emeritus. Dr. Clarence S. Yoakum has been appointed dean of the graduate school to succeed the late Dr. G. Carl Huber. Dr. James D. Bruce, vice president of the University, has been appointed chairman of the newly formed division of health science. The executive committee in charge of the Medical School is now composed of Dr. Furstenberg as chairman; Dr. James D. Bruce, director of the department of post-graduate medicine; Dr. Harley A. Haynes, director of the hospital; Dr. F. A. Collier, head of the department of surgery; Dr. Carl V. Weller, head of

the department of pathology; and Dr. Udo J. Wile, head of the department of dermatology.

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Getting Along by Degrees

More than 62,000 persons have earned more than 71,000 degrees from the University of Michigan since the first graduating class in 1845, according to figures compiled by the university catalog office. Another 40,000 who attended the university, but did not receive degrees, bring the total of former Michigan students to 102,740. Records show that 71,088 degrees were conferred from 1845 to July 1, 1934, to 62,150 persons. Non-graduates in all schools and colleges through the academic year 1930-31 totaled 40,590. The known deceased include 11,258 graduates and 9,423 former students who did not receive degrees. There are 50,892 living graduates and 31,167 non-graduates.

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Beaumont Foundation

The annual Beaumont Foundation lectures in connection with the Wayne County Medical Society, Detroit, will be delivered at the Art Institute on the evenings of February the eighteenth and nineteenth. Dr. Lewellys F. Barker of Johns Hopkins is the lecturer for the current year. The subjects are, "Heredity and Environment in Relation to the Handicapped" and "The Origin and Nature of Human Handicaps." As in other years, a cordial invitation is extended to every member of the Michigan State Medical Society to attend.

* * *

Dr. Maurice Fishbein, editor of the *Journal of the American Medical Association*, addressed a lay audience of over 3,000 at the Temple Beth El, Detroit, January 8, on the subject of the Cost of Medical Care. The address reviewed the growth of medicine during the past forty-five years, contrasting what the patient gets as medical care today with medical care available in the nineties. In discussing the address, one speaker's suggestion that the employer pay his employees a just wage and let them take care of their obligations with the doctor brought forth great applause.

* * *

Dr. Julius Powers has returned home after three months of post-graduate study at European centers, chiefly Vienna and Berlin. The January and February JOURNALS contain an intimate account of Dr. Powers' experience abroad. He reports a stormy voyage on the way home, in spite of which he was able to take his three meals a day in comfort.

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Dr. W. H. McCracken, Dean of the Wayne University Medical School, Detroit, has resumed his administrative duties after a period of illness in November and a cruise about the Caribbean Sea as a convalescent measure.

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"Great Oaks From Little Acorns Grow" and "Your Protection Against Quackery" were the topics given over the Michigan Radio Network by Doctors O. M. Randall and J. E. McIntyre respectively.

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Dr. W. E. Ward of Owosso, secretary-treasurer of the Shiawassee County Medical Society, is in Memorial Hospital at Owosso suffering from a fractured hip sustained by a fall December 11, 1934.

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As we go to press we learn that a special meeting of the House of Delegates of the A. M. A. has been called by the Speaker to be held in Chicago, 10:00 a. m., February 15.

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Dr. G. L. Walbott has returned to his practice in Detroit after a visit to European clinics.

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Dr. Walter J. Cree of Detroit is spending part of the winter in New Orleans.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

HANDEDNESS, RIGHT AND LEFT. By Ira S. Wile, M.S., M.D., 439 pp. Boston: Lothrop Lee & Shepard Co., 1934.

Normally, people tend to employ one hand, usually the right, in preference to the other. The reasons for so doing are complex, and the changing of deep-rooted preference for using one hand frequently results in many types of social maladjustment. Dr. Wile has patiently searched an extensive literature, and the results of his study are related in this book. Man of the Stone Age Period, like the lower primates, was apparently ambidexterous. About the Bronze Age, one hand, more often the right, became dominant, and it has remained so to the present. The work is concerned with an evaluation of those factors which lead a person to prefer one hand over the other. Such features as biological and hereditary factors, the importance of training and social and religious taboos are surveyed. Most people are well aware that one hand is more useful than the other, but commonly they do not realize the fundamental importance of such specialization, how it arose and how it was maintained. Despite occasional heavy reading, the reader who has considered his hands as merely hands will find many really startling ideas.

WHY HE BECAME DERANGED

The newly-arrived patient at a mental hospital appeared exceptionally docile and quiet, so much so, that the head of the institution took him aside to ask him if he realized his position.

"My man, do you know where you are?"

"Yes, worse luck, I do; I am in your lunatic asylum for treatment."

"Tell me what happened to you?" asked the doctor.

"Tragic circumstances. I will explain; then perhaps you will understand.

"I married a widow with a grown-up daughter. Two months later my father married the daughter of my wife; consequently my wife became the mother-in-law of her father-in-law. My step-daughter became my step-mother, and my father, from then on, my son-in-law.

"A year later my step-mother had a son, who was my step-brother and the grandchild of my wife; therefore I was the grandfather of my step-brother.

"My wife now had a son who was, naturally, the brother of my father's wife, and, therefore, his brother-in-law. My step-daughter is, also, the grandmother of her brother because he is the son of her step-son, as I am the step-father of my father; my son is the step-brother of my father, at the same time the son of my grandmother, as my wife is the daughter-in-law of her daughter.

"I am the step-father of my step-mother, my father and his wife are my step-children; my father and my son are brothers and brothers-in-law. My wife is my grandmother, for she is the mother of my step-mother, and I am my own grandfather. And that," added the patient, "is what brought me here."

The doctor nodded understandingly, and was then taken in, for a few days' treatment, himself.—*The Tailor.*